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Richard Joyer

has been found to be complete and satisfactory in all respects,
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Walden University
2017

Abstract

Factors Affecting Secondary Students' Learning in
a Credit Recovery Program

by

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MA, University of Texas San Antonio, 2003

BA, University of Texas San Antonio, 1995

Project Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education

Walden University

June 2017

Abstract

A credit recovery (CR) program was implemented at a rural high school in Texas to assist with high school completion. While graduation rates increased, the time for completion also increased for students in the CR program. The purposes of this correlational study were to examine factors that impact student learning in the CR program and to determine whether teachers were implementing student-centered instruction. Piaget's constructivist theory provided the framework for the study. The guiding question was to examine the relationships between student achievement and classroom environment, active learning, attendance, and student success from those enrolled in the credit recovery class at the target high school. A sample of 103 students in Grades 9-12 completed a 65-item Likert-scale customized form of the What Is Happening in the Classroom (*WIHIC*) survey with subscales in classroom environment, active learning strategies, student motivation, and student success. A correlational analysis was conducted using scores from the state assessment test, attendance data, and scores from the *WIHIC*. Results showed no statistically significant relationships among the variables. Based on these findings, a professional development program was crafted to assist teachers at the study site with writing CR curriculum to better align with the Texas Essential Knowledge and Skills and to include more hands-on constructivist learning activities. Implications for positive social change include the potential to improve secondary students' academic outcomes.

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Section 1: The Problem

There are various styles of teaching and learning. A teacher-centered style consists of lecture and note taking, whereas a student-centered approach incorporates a more diverse and unorthodox method that consists of communication between the instructor and the student, where the educator acts more as a facilitator. This promotes higher order thinking skills allowing for a deeper application of what has been learned. As the field of education has changed over the years, research has shown people have changed the way they learn. Researchers have found various models such as the feminist, multicultural, and developmental models are geared towards student teacher relationships (Cornelius-White, 2007). To keep academic standards at a level of excellence, it is pertinent that educators change their strategies of teaching and individualize for their students (Bastug & Demirtas, 2016).

These teaching strategies include transformationist pedagogies (Howard, 2006) in which teachers adapt strategies that cater to cultural and individual differences while encouraging thinking and learning and maintaining a student-centered ideology. Student-centered research views learning as constant, connected, repetitious, intricate, and comfortable. A trusting and safe learning environment is created when teachers have classrooms that incorporate supportive relationships and students are given control and ownership over their learning (McCombs, 2004). Whether during kindergarten or at the college level, teaching and learning requires a more advanced level of collaboration to be successful.

Collaboration

Fauske (2006) found that collaboration occurs when interested parties share a common goal and take the appropriate action to achieve that goal. Educators must earn the respect of their students, while also learning to respect the needs of their students. The dropouts of today are usually associated with minority groups, or those who have a low socioeconomic status. The Institute of Educational Sciences (2016) reported an overall graduation rate at 82% for the 2013-2014 school year. Asian students had the highest graduation rate of 89%. White students were at 87%. Hispanic students' graduation rates were at 76%, Black students followed with 73% and American Indian students had 70%.

Only through the collaborative process in the classroom will the teacher and student gain the mutual respect needed to be successful in teaching and learning (Tichnor-Wagner, Harrison, & Cohen-Vogel, 2016). This collaborative process requires dialogue between all stakeholders, and not a traditional style of teaching. Once the collaborative process begins, the teacher will build a relationship with their students, thereby fostering and encouraging mutual respect. Knesting (2008) discovered that student-centered lessons and caring teachers allowed students to be successful in the classroom.

Relationships

In my professional experience as an assistant principal and principal of three different high schools in Texas, I have observed that the teachers who build and maintain appropriate classroom relationships with students are the ones who appear to have the greatest successes. The relationships built between teachers and students is due to the

dialogue and collaboration that takes place in class on a daily basis. It appears that the teachers with the most classroom disruptions are those who refuse to accept a less traditional method of teaching. Fauske (2006) found that collaboration requires more than pen-and-paper activities.

Garza (2008) found five dominant themes of caring towards students. Caring teachers scaffold while teaching a lesson, use actions as a powerful message, make time for students, show a personal interest in the student, and provide effective academic assistance. Teachers who are building relationships with their students are assisting the administration in changing the culture of the school.

Engagement

Engagement can be defined as being involved or committing time to a person or place (Osterman, 2000). De Jong, Moolenaar, Nienke, & Phielix (2016) suggest dialogue requires engagement, engagement requires collaboration, and collaboration builds relationships that lead to academic success. When student engagement is high, learning communities evolve within the school and a positive culture is created characterized by a common purpose, shared values, commitment to student learning, and consistent goals. This leads to relationships between students that are built on trust, respect, fairness, and support. Sabanci, Ahmet, Sonmez, & Yilmaz (2016) found this type of positive school culture encourages empowerment, responsibility, and initiative, while ensuring the opportunity for supportive and collaborative interaction among all stakeholders.

Definition of the Problem

The purpose of this study was to examine factors affecting student learning in a credit recovery program for secondary students. This doctoral study was needed because of the increased rates of high school continuers and graduates in a small rural community located 40 minutes from San Antonio, Texas. The school comprised approximately 700 students with 90 teachers and staff members. According to the Texas Education Agency's Federal Report Card for Texas Public Schools (2016a) the continuer rates increased from 95.5% in 2013 to 98.0% in 2015. The report also showed the percentage of students completing their general education diploma (GED) increased from 0.0% for both 2013 to 0.7% in 2015. Individuals who do not finish school in four years are classified as continuers. More students are electing to complete their high school careers in alternative school settings. I have set out to determine the relationships between student's achievement, the classroom environment, active learning, student success in the classroom, students' motivation to stay in school, and attendance.

The implications at the local or national level include students not finishing their high school requirements in 4 years and lagging behind in becoming productive members of society by gaining employment or attending a college, university, or trade school. This creates a local problem by having older students still in school and unable or unwilling to be successful in their community. Students who become bored with their local surroundings and lack employment opportunities are more likely to encounter problems with law enforcement and the legal system (Music, 2012). According to Monrad (2007), almost 75% of state prison inmates and 59% of inmates in federal prisons quit school.

Moreover, those who quit school are 3.5 times more likely than high school graduates to be imprisoned some time during their life.

Rationale

Evidence of the Problem at the Local Level

Students may become unmotivated to learn due to teachers' expectation levels. Knesting (2008) indicated that students stated during interviews that they were not motivated to learn because they believed teachers did not care and were not invested in teaching. Knesting also discovered that students felt the academic setting was geared towards discipline rather than education. According to the Texas Education Agency (2016a), the local high school graduation rates changed from 93.6% in 2014, to 97.3% in 2015. The 5 year extended graduation rate was at 94.9% in 2013 and increased to 95.9% in 2014. The dropout rate for 4 year students in 2014 was 2.9%. The 4 year dropout rate decreased in 2015 to 2.0%. The 5 year dropout rate in 2013 was 4.5% and it decreased in 2014 to 2.9%. This data shows that graduation rates are increasing for students who attend high school for 4 years, and that dropout rates are decreasing. However, this data also shows an increase in graduation rates for 5 year high school students. This data connects to my hypothesis that relationships exists between teacher effectiveness and student success, and teachers' classroom strategies could positively influence the classroom environment, student achievement, student success, active learning, motivation, and attendance.

For those students who fail courses required for graduation, the local high school has a credit recovery program to assist in reducing the dropout rate. Failing or not

obtaining a required class to graduate is the only criterion to be enrolled in the credit recovery program. Acceptance into the program must be approved by an administrator.

The dropout rate for this local school beginning with the 2005-2006 school year was 0.2% (Texas Education Agency, 2007). The dropout rate for the 2006-2007 school year was 1.2% (Texas Education Agency, 2008). In 2007-2008, it was 3.0% (Texas Education Agency, 2009). The dropout rate decreased to 2.5% during the 2008-2009 school year (Texas Education Agency, 2010). It remained at 2.5% for the 2009-2010 year. (Texas Education Agency, 2011)

During the 2008-2009 school year, the Texas Education Agency began to track completion rates for 5th year seniors, those who would enter into the credit recovery program to either complete a GED or receive a high school diploma. I began working at this school in 2007 and observed that some students who had dropped out attempted to re-enter through the credit recovery program. Some were successful while others were not and dropped out for a second time.

For the class of 2008, 89.3% graduated as 5th year seniors, 1.5% received their GED, and 7.8% dropped out of the program (Texas Education Agency, 2009). For the class of 2009, 83.7% of 5th year seniors graduated, while 3.7% obtained a GED and 11.1% dropped out of school (Texas Education Agency, 2010). This indicates students were seeking alternative methods of graduation and gives credence to the hypothesis of this study.

Evidence of the Problem From the Professional Literature

The U.S. dropout problem, as defined by Bridgeland, Dilulio, and Morison (2006), has been identified as explosive. Bridgeland et al. indicated the annual cost of providing for youth who fail to finish high school and their families ranges from \$1.7 to \$2.3 million. This also causes a limited labor supply for an economy with an increasing need for educated workers. Elevated dropout rates cause increasing welfare costs and prison populations (Cassidy & Bates, 2005).

Research shows that many factors have a role in the reasons student's drop out or take longer to complete high school. Hickman, Bartholomew, Mahtwig, and Heinrich (2008) suggested that student achievement is based on elementary foundations and social circumstances. Teachers may fail to consider all of these factors and expect students to be focused in the classroom, while some students find it difficult to concentrate in school because of teaching methods. In today's world of technology and the Internet, teachers have to compete with iPods, cell phones, handheld gaming devices, and social media websites accessible during the school day. It is vital for teachers to have engaging and relevant lessons to maintain the focus of the students in the classroom. Denti and Guerin (1999) suggested that more attention needs to be given to preparing school staff to engage and empower students in relevant learning styles. Determining teacher effectiveness was the intent of this study.

The U.S. Department of Education (2008) recommended six strategies for teachers and administrators to assist in minimizing drop outs or continuers in high school: using statistical data, having mentors, providing enrichment programs that focus on

academics and positive student behavior, incorporating constructivist learning methods, and teaching lessons that are relevant to students. Of these six strategies, four have reported evidence of having moderate success, while two have not been as strong (U.S. Department of Education, 2008).

The U.S. Department of Education found that having a teacher as a mentor allows for students to have ownership in the school, providing enrichment programs closes academic gaps, using constructivist teaching strategies creates a sense of belonging, and providing relevant lessons engages students more and prepares them for post-graduation. These findings are related to the variables I have chosen for this study.

Aud et al., (2011) found that the national dropout rates declined from 14% to 8% from 1980 to 2009. The largest change occurred between 2000 and 2009. A 3% dropout rate was reported for those nine years. Aud et al. (2011) suggested that the rates and percentage changes that occurred over time were dependent upon ethnicity, gender, and race.

Aud et al. (2011) indicated that dropout rates declined among Hispanics, African Americans, and Caucasians; however, the Hispanic population maintained the highest dropout percentage of the three. Aud et al. also reported that Asian Americans had the lowest dropout rates of the four ethnicities. The dropout rate for genders was 7% for females 9% for males (Aud et al., 2011). These statistics reveal that graduation rates are increasing while dropout rates are decreasing. The statistics indicate more students are graduating in 5 years through alternative methods. The Texas Education Agency (2016a) shows a 1% increase in 5th year graduations from 2013 to 2014.

Definitions

This quantitative study was prompted by the student failure rate, dropout rate and continuation of seniors into a fifth year credit recovery program, in a small rural community in the Hill Country of Texas. In reviewing the information provided by the state of Texas, the challenge was to identify a remedy to decrease dropout rates and improve student success.

The credit recovery online class includes a software program called the A-Plus Learning System (A+LS) where students have an account and password set up for them by an administrator. Various courses can be added for the student to complete high school credit. The A+LS is a self-paced, self-motivated system where students are responsible for the materials associated with the lessons of each subject. Students are given the opportunity to study the materials and complete the lessons for credit. They must complete each of the lessons with a passing rate of 70% to receive credit for the course. The A+LS is computer based and is accessed through the school's computer server however, it is only available on school computer terminals. The A+LS is not accessible from any other locations due to security reasons and to ensure the work is completed by the student who is enrolled in the program.

The Texas Education Agency (2016b) defines students who leave school and never reenter or complete their education as dropouts in Grades 7 - 12. The Texas Education Agency (2016a) also defined a leaver as one who receives a diploma or a general educational development (GED) certificate. This also includes those who continue high school through alternative schools or become deceased. A continuer is

defined by The Texas Education Agency (2016c) as a student who take 5 years to graduate. According to The Texas Education Agency (2016c) a graduate is a student who graduates from high school.

Variables

For this study the variables included achievement scores and attendance rates of participants along with the adapted four attitude scales from the combined version of the What Is Happening In Class survey (MacLeod & Fraser, 2009) and the Student Perspective Survey of the A+nyWhere Learning System (Lee, 2011). The original attitude scales of the *WIHIC* survey from MacLeod and Fraser (2009) are Involvement, Equity, Student Cohesiveness, Task Orientation, Cooperation, Investigation, and Teacher Support. The nine questions of the Student Perception Survey focused on college preparedness, online instruction, increase of effort, enjoyment of online instruction, motivation to attend school, encouragement to stay in school, increased level of knowledge, increased knowledge with online learning versus direct instruction, and whether they would recommend the A+LS to a potential dropout (Lee, 2009). The modified and adapted attitude scales for this survey were Student Motivation to Stay in School, Classroom Environment, Student Success, and Active Learning.

The variables were regrouped to meet the needs of this study with permission from both authors from each of the original surveys. Within the original variables of the *WIHIC* survey, I found similar components of each section that would allow me to use a smaller number of variables that could be recategorized. With permission from each author, I was able to change a few words in some of the statements to meet the needs of

this study. For example, I changed the word *labs* to *activities* in Questions 43, 45, and 46. To create each of the new sections of the survey, I used statements from the original variables and combined them into sections based on what the statements were surveying and what circumstances a student would experience in an educational setting with respect to the classroom environment, active learning, and student success. I used Questions 57 and 58 from the A+LS survey to determine the relationship between student motivation to stay in school and school attendance rates without changing any of the language of the statements.

Significance

The increase of high school drop-outs is of significant concern in the state of Texas. The Texas Department of Criminal Justice (TDCJ, 2006) houses within its correctional facilities the Windham School District. When prisoners of the state enter this system, an educational evaluation is performed. According to the TDCJ, the educational achievement level of convicts ranges from 7th to 8th grade, while their last completed school year ranges from 9th to 10th grade.

The impact of students who do not finish school is enormous. The lack of prepared workers has a negative effect on the economy. If jobs cannot be filled, the economy and infrastructure will be negatively affected. In the same manner, by having students delay graduation by one or more years in an alternative graduation program (AGP), students will not be prepared to compete for positions at the university level or jobs that require critical thinking skills (Sahin, Arseven, & Kilic, 2016).

Not only does becoming a dropout cause problems for the student, there are consequences for the school district. According to the U.S. Department of Education (2011) holding schools accountable will reward and recognize schools for closing learning gaps, while providing flexibility for schools to develop evidence-based interventions to improve educational standards on each campus.

It is pertinent to resolve the issue of increasing high school dropout and delayed graduation rates of alternative graduation programs because of the effects they can cause. The relationships teachers build with students play a major role in influencing students' future in school. The time has come to change the way teachers behave in the classroom and change student perceptions so they may have a more successful outcome (Haakma, Janssen, & Minnaert, 2016).

Research Questions

The guiding research questions for this study were the following:

1. For students in the A+nyWhere Learning System, what is the relationship between student achievement and classroom environment?
2. For students in the A+nyWhere Learning System, what is the relationship between student achievement and student active learning?
3. For students in the A+nyWhere Learning System, what is the relationship between student motivation to stay in school and school attendance rates?
4. For students in the A+nyWhere Learning System, what is the relationship between student achievement and student success?

At the local district, the problem of increased dropouts and delayed graduations is increasing yearly. A solution to minimize the problem must be found. I used a survey methodology to examine the experiences of at-risk students who opted to obtain their education through an alternative computer-based program within the school. I also examined the reasons students elected to attend the alternative graduation program. The purpose of this study was to determine whether pedagogical methods exist to meet students' needs, and to examine relationships that may encourage positive growth and completion of a high school diploma.

Hypotheses

For this quantitative study the hypotheses were as follows:

H_{a1}: There is a relationship between student achievement and the classroom environment among high school students who are or were in the A+nyWhere Learning System.

H₀₁: There is no relationship between student achievement and the classroom environment among high school students who are or were in the A+nyWhere Learning System.

H_{a2}: There is a relationship between student achievement and active learning of students enrolled in the A+nyWhere Learning System.

N₀₂: There is no relationship between student achievement and active learning of students enrolled in the A+nyWhere Learning System.

H_{a3}: There is a relationship between student motivations to stay in school and school attendance rates.

H₀3: There is no relationship between student motivations to stay in school and school attendance rates.

H_a4: There is a relationship between student achievement and student success due to being enrolled in the A+nyWhere Learning System versus a traditional direct learning classroom setting.

H₀4: There is no relationship between student achievement and student success due to being enrolled in the A+nyWhere Learning System versus a traditional direct learning classroom setting.

A quantitative approach was used to collect data to test the hypotheses and answer the research questions. A sample of 103 participants was gathered in a school where a credit recovery program called the A+nywhere Credit Recovery program was offered to students during the 2015–2016 school year. I used this information to determine teacher classroom effectiveness in the credit recovery program relative to the culture of the school.

Literature Review

Theoretical Framework

The theoretical framework for this study was Piaget's (1952) constructivist theory of learning. Kumari (2014) suggested constructivist learning styles are continuous, non-linear, complex, recursive, and relational. The foundation of this type of instructional model is derived from an inquiry-based approach to learning, where students actively engage in acquiring knowledge that promotes success. A constructivist approach draws on a student's existing knowledge, beliefs, and skills while synthesizing new

understandings from prior learning and information. Kumari found that children construct knowledge collectively and individually based on their experiences. In theory, training teachers in constructivist teaching methods may provide students with learning methods that will produce better academic results. This approach may also improve student attendance and standardized test results.

The History of Alternative Schools in Texas

Alternative schools have existed since the birth of the public education (Hodgeman, 2016). Hodgman suggested alternative schools were created to address student problems such as poor attendance, discipline, learning deficits, and drug problems. Hodgman defined an alternative school as one that serves students who are at risk of failure in the conventional system of education.

The reason for the differentiation between alternative schools and public schools is due to the difference in the goals of each of the schools. Hodgeman indicates that student needs are not being met. Schools assume students are not different and learn all the same way. Cogmen and Saracaloglu (2016) stated that a student-centered learning environment is based on constructivist paradigms. A teacher-centered lesson includes rote memorization, lecture, and notes. Higher order thinking skills are not associated with this method of instruction, and with standardized exams students are required to learn information within a given timeframe or get left behind. When students feel left out they can become discouraged and drop out of school.

According to Atjonen (2012), a student-centered teacher provides feedback, is fair and positive, is supportive, gives advice, listens diligently, is demanding, and is flexible.

Student-centered lessons should target a student's personal needs, interests, and abilities, while also respecting that person as a part of the classroom. Many alternative schools offer this type of learning environment.

Alternative schools accommodate various types of learning styles. This may include differentiated instruction that is more personalized to individual students. Differentiated instruction also accommodates diversity among students. Alternative schools also can have smaller classes, providing for more one-on-one interaction. Students who enroll into alternative schools may attend due to a variety of reasons including discipline issues, low or failing grades, high absenteeism, pregnancy, or poor parenting (Putwain, Nicholson, & Edwards, 2016). The credit recovery program at the local school is intended to assist students in retrieving credits lost due to failing grades or poor attendance. Also, when a student has not graduated within 4 years, the student is able to use the credit recovery program to earn enough credits to graduate in the high school's alternative graduation program.

Various Types of Alternative Schools

The local high school's credit recovery program is similar to other alternative schools in that it offers another method of acquiring state-required credits to graduate. Alternative schools within the public school system used the ideas of alternative schools to create what were called open schools. These types of schools offered more choices for students, parents, and teachers. They allowed for a child-centered learning environment and took into consideration the individual needs of each student. As each district changed the schools to meet students' needs, a variety of names evolved for the different types of

schools that were created. There were schools without walls, multicultural schools, magnet schools, and schools within schools, continuation schools, fundamental schools, alternative graduation programs, and learning centers.

In today's alternative education, various schools and programs have been created to increase graduation rates and decrease drop-out percentages. The mission and goals are identical to those of the 1960s movements. The difference exists only in the name of the programs. In the 21st Century, the Texas state government has allowed for the development of charter schools, the Texas Virtual School Network, the High School Equivalency Program (HSEP), the Job Corps, and the Texas Challenge Academy in hopes of producing graduates and decreasing the dropout rate.

The characteristics of these types of schools are similar. They offer small classroom size, a supportive environment, flexibility in structure, and one-to-one interaction between student and teacher, while emphasizing student decision-making and providing learning opportunities relevant to the student's future. Schools like this are identified with inventive classroom strategies that do not limit the learning possibilities of students and allow for teachers to attend transformative professional development (Plows, 2017). Constructive teaching methods rely on innovative teachers to create lessons that will motivate students to learn. These types of lesson should also engage the student with current relevant issues. It is vital to the learning process of students to be involved in this type of classroom environment.

Importance of Teacher Pupil Relationships

Research has indicated the importance of student-teacher relationships in promoting students' emotional well-being (Pianta, Downer, & Hamre, 2016). Al-Zoubi and Younes (2015) found the factors that affect students' low academic achievement include the use of teacher-centered strategies and not student-centered methods. When teachers apply student-centered strategies, students gain a respect for the teacher and are more successful in school.

Dallmer (2013) stated it is important for teachers to build positive relationships with students. Nieto and Bode (2012) suggested that teachers need to take learning environments and student choices into consideration when developing student-centered lessons. To express the importance of building relationships, Osterberg, Swigris, Weil, and Branch (2015) described successful students as having teachers who share the qualities of being selfless, generous, and caring with regard to their relationships with students.

Kathard, Pillay, and Pillay (2015) discovered that students who were taught in teacher-centered classrooms were unsuccessful in comparison to those who were taught in student-centered environments. Building security and trust through open-ended questioning plays a major role in establishing a relationship between student and teacher. Some students find this type environment more conducive to learning and are more successful. Alternative programs are not designed to provide a watered down curriculum as they do have the same standards as public education programs.

Studies have indicated that other major causes of students dropping out or attending alternative graduation programs include the lack of rigor in regular high school curricula. A large number of dropouts reported disinterest, lack of engagement, and lack of relevance between the curriculum and the real world (Lee, 2011). Educators must work to create caring relationships with students that allow for channels of understanding to establish respect for students. Lee stated most teachers enter the teaching field because they do care about children and wish to make them successful.

Perceptions

Perception is the way a person views a situation or place. Each person's perception of life may be different from someone else's. This can cause a misinterpretation of ideas, facts, and actions. When students are identified as at risk, teachers may misperceive them as problematic, disruptive, and noncompliant in the classroom. The perception of being at risk creates a predisposed bias among teachers (Lee, 2011).

If school districts were to have a culture that incorporated the school, community, and child, then appropriate planning for academic success of students would follow (Rooney, Mideto, & Birch, 2015). Teachers may intend for their actions in the classroom to be caring; however, students from different cultural backgrounds may not view those actions as caring. Teachers should respond to individual needs and not exhibit unconscious caring to cover everyone in class. If schools are where change occurs, then teachers must become agents of change, must analyze themselves, and must realize that their actions can strengthen or stifle a student's achievement or success (Scott, Cooper, &

Hirn, 2016). Scott et al. stated if students perceive that teachers are uncaring, this will lead them to have a negative attitude toward learning. The practice of ability segregation and the inability of teachers to connect with students are other reasons students drop out of school. Therefore, it is vital for teachers to improve student engagement to prevent students from dropping out.

Dropouts

According to Warren (2015), for students to be successful academically, emotionally, and socially, it is necessary for teachers to express empathy in the classroom. Astuti (2016) found a positive correlation between student-centered teaching strategies and successful students. Teachers who exhibited empathetic and sincere qualities were found to have students who were positive and motivated to learn. Getting teachers to treat disadvantaged students the same as their counterparts can be difficult. Research has shown that teachers will modify higher level curricula based on their belief that lesser equipped students cannot learn and will never use abstract concepts (Hunt, 2015). Students who do not receive empathy and find school challenging are more likely to become dropouts as they progress to the secondary level.

Haakma, Janssen, and Minnaert (2016) found that a high level of teacher emotional engagement with students leads to the prevention of students wanting to drop out of school. Having a positive, empathetic, and motivating teacher is important to a student's success.

Dropping out is not an event that just occurs. It is a process that happens over a period of disengagement beginning at the elementary level and extending to the high

school years (Haakma, Janssen, & Minnaert, 2016). Many factors over time play a crucial role in students' lives. Students can become disengaged in school, which can lead to mental and academic deficiencies. Young people can also become alienated by peers and teachers because of retention and discipline issues.

Other factors related to the problem of dropouts are familial issues. Students who get married or become pregnant often drop out of school (Dockery, 2012). In some cases, young adults feel obligated to seek employment to assist their family financially. This too can cause students to drop out of school, as their priority for basic physiological needs must be met. Other students who feel pressure to leave school are those who question their sexual orientation (Bishop & McClellan, 2016). These students are often targets of hazing and bullying in schools.

Relevant Critical Analysis

The United States has thousands of students who drop out on a regular basis. Many of them drop out because of poverty, disabilities, and other reasons. This creates negative long-term effects for each person and society as a whole (Iachini, Buettner, Anderson-Butcher, & Reno, 2013).

Another indicator of drop outs is absenteeism (Sahin, Arseven, & Abdurrahman, 2016). Students who do not attend school regularly have higher dropout rates than those who attend school on a regular basis. Individuals who have excessive absences tend to be less productive citizens of society, while students who go to school on a regular basis are more successful in their future (Kearney & Graczyk, 2014). These students also have a

higher post-secondary educational success along with greater job opportunities (Balfanz & Byrnes, 2012).

Implications

The implications for social change based on the findings of this study include improved teacher professional development and tracking systems for schools. Providing teachers with constructivist professional development may encourage teachers to focus on students while being mediators and partners in their learning process. This will ensure the highest quality of learning (Barreto & Haydar, 2016).

Dynarski et al. (2008), noted that experts have encouraged schools districts to create and maintain databases to identify possible dropouts. These data should include a record of retention, academic achievement, disengagement, discipline, and absenteeism (Dockery, 2012). Tracking systems would allow teachers to become advocates of students through early detection and proactive responses to various factors. According to a study completed by the Regional Educational Laboratory at Pennsylvania State University (as cited in Burzichellin, Mackey, & Bausmith, 2011), researchers found that the strategies most needed by participants included advocating for students, attendance monitoring, and supporting and engaging families.

Another possible implication of this study includes the development of professional learning communities (PLCs). PLCs include teachers working together to foster a culture of success for both students and teachers, while maintaining a positive school environment that is safe and conducive to learning. PLCs also allow for the

implementation of an effective discipline management system that supports teaching and learning across the campus (Williams, 2012).

Findings from this study could be used to improve campus cultures, student-teacher awareness, student attendance, student academics, and graduation rates. Schools may also experience a decrease in discipline referrals, truancy, court filings, and drop outs.

Summary

Alternative types of education have existed since the 19th century. The cookie cutter method of schools has not been effective. Students have different learning styles, perceptions, and personal issues. Students wish to be acknowledged and accepted. Students thrive on respect and engagement in the classroom (Kiefer, Alley, & Ellerbrock, 2015).

To prevent students from quitting school various alternate graduation programs have been developed. These programs allow for students to be successful and complete their academics, while establishing a relationship with the teachers and administrators who work with them. Students are given the opportunity to respect and be respected by those who teach them. These programs boost student's level of confidence allowing them to graduate and be productive citizens.

The following section presents the methodology of the project study and details the research design and approach, the population and sample size, and the research instrument. I also describe data collection and data analysis techniques.

Section 2: Methodology

The purpose of this study (IRB approval # 08-20-15-0158833); was to examine factors affecting student learning in a credit recovery program for secondary students by examining the relationships between the variables of student achievement, classroom environment, active learning, student success, the motivation to stay in school, and attendance for students in the A+nyWhere Learning System. Student-teacher relationships play a major role of influencing a student's decision to remain at school. The way teachers think and teach in the classroom has an effect on the students they serve.

This section includes the procedures and results of the data analysis. The research process details the hypothesis, research questions, instrument, participants, setting, data collection, data analysis, and researcher's role. I also identify events influencing the participants decision to attend the credit recovery program, and ethical considerations of the study.

Research Approach

I examined teacher classroom effectiveness from students enrolled in a credit recovery program using a correlational analysis of scores from the state assessment test, attendance data, and score totals of a combined version of the *WIHIC* survey (MacLeod & Fraser, 2009) and Student Survey of the A+nyWhere Learning System (Lee, 2011).

I chose a quantitative study over a qualitative study based on the number of respondents participating. Quantitative research usually consists of a larger number of participants, and statistical methods are used in the data analysis. According to Yusuke

(2013), comparative research is used to justify relationships and is classified as quantitative research. The use of qualitative research would have produced weaker results given the number of participants.

Two paradigms provide the foundation of these two types of research: positivism and interpretivism. Researchers acknowledge that there are existential, epistemological, and specialized differences between the two paradigms (Onwuegbuzie & Leech, 2005). Firestone (1987) stated that quantitative research has roots in the positivist model, and qualitative research is founded on an interpretivist paradigm. Arghode (2012) argued that quantitative research is conducted using quantifiable variables to address a problem. The positivist paradigm is based on the laws of cause and effect. This study's goal was to determine the strength of the associations among student achievement, classroom environment, active learning, student success, motivation to stay in school, and attendance for students in the A+nyWhere Learning System.

Research Questions

The guiding research questions for this study were the following:

1. For students in the A+nyWhere Learning System, what is the relationship between student achievement and classroom environment?
2. For students in the A+nyWhere Learning System, what is the relationship between student achievement and student active learning?
3. For students in the A+nyWhere Learning System, what is the relationship between student motivation to stay in school and school attendance rates?

4. For students in the A+nyWhere Learning System, what is the relationship between student achievement and student success?

Hypotheses

For this quantitative study the hypotheses were as follows:

H_a1: There is a relationship between student achievement and the classroom environment among high school students who are or were in the A+nyWhere Learning System.

H₀1: There is no relationship between student achievement and the classroom environment among high school students who are or were in the A+nyWhere Learning System.

H_a2: There is a relationship between student achievement and active learning of students enrolled in the A+nyWhere Learning System.

H₀2: There is no relationship between student achievement and active learning of students enrolled in the A+nyWhere Learning System.

H_a3: There is a relationship between student motivations to stay in school and school attendance rates.

H₀3: There is no relationship between student motivations to stay in school and school attendance rates.

H_a4: There is a relationship between student achievement and student success due to being enrolled in the A+nyWhere Learning System versus a traditional direct learning classroom setting.

H₀4: There is no relationship between student achievement and student success due to being enrolled in the A+nyWhere Learning System versus a traditional direct learning classroom setting.

Design

A correlational study was chosen over a causal or experimental design based on the guiding questions and purpose of the study. I chose to determine the effectiveness of the A+nyWhere Learning System as a credit recovery program by examining the relationships between the variables of student achievement, classroom environment, active learning, student success, motivation to stay in school, and attendance for students in the A+nyWhere Learning System. In a causal comparative study, I would have needed groups to compare. In this study, I used individual students. An experimental design would not have been feasible as this would have required controls in the research that would not have been possible in a study of this type. As Astuti (2016) found a positive correlation between student-centered teaching strategies and successful students. This correlational study may assist in supporting student-centered teaching strategies in the classroom and prevent future students from dropping out of school.

This project study was conducted by combining the *WIHIC*, What Is Happening In the Classroom survey (Chionh & Fraser, 2009) and the Student Survey of the A+nyWhere Learning System, (Lee, 2011). This student survey was designed to evaluate teacher classroom effectiveness with students enrolled in a credit recovery program by examining the relationships between the variables of student achievement, classroom environment, active learning, student success, motivation to stay in school, and

attendance for students in the A+nyWhere Learning System. I hypothesized that these relationships would assist in determining classroom teacher effectiveness from students enrolled in the credit recovery program. Each of the variables would have a significant role in student success, and teachers' classroom strategies would positively influence the classroom environment, student achievement, student success, active learning, motivation, and attendance.

Setting and Sample

Criteria for Selecting Participants

The research setting for this study was a 4A high school located in a small rural community located 40 minutes from San Antonio, Texas. The school was composed of approximately 700 students with 90 teachers and staff members. Each year approximately 100 students are enrolled to the A-Plus Credit Recovery Program. According to the 2011-2012 Academic Excellence Indicator produced by the Texas Education Agency (2013) the student population was 77.1% White, 21.4% Hispanic, 0.5% American Indian, and 0.5% Asian students. The participants were a convenience sample composed of 103 students. These participants were selected based on their enrollment in the A+ Credit Recovery program. Students who enter the A+ Credit Recovery Program are given the option of participating because they failed a required course for graduation.

I administered the online survey using a program created in Google. The survey was completely confidential. Per district policy, the participants were provided with all of the appropriate consent forms prior to the day of the survey. These forms included the parent consent form, the assent form, and the consent letter, which were to be signed and

returned to me. The students were between 14 and 19 years of age in Grades 9 through 12. The participants volunteered to participate and were able to withdraw their participation at any time.

Students completed the survey during nonacademic time. I gave students access to the web-link to complete the survey during their nonacademic study hall time or another time of their choice either before or after school. Once the surveys were completed, the answers were compiled in an Excel spreadsheet and transferred to the Statistical Product and Service Solutions (SPSS) software program. Only the answers to the survey questions were documented. All of the permission and informed consent letters were stored where only I had access. All records will be kept for 5 years in locked storage. I will be the only person to have access to the survey data. In the consent letters, I clearly stated that students could volunteer to participate and could withdraw at any time. The letters also indicated that there were no risks to this study and all data would be confidential. I provided phone and email contact information if participants had questions about the study. In the letters, I also explained the possible benefits for students.

Justification for the Number of Participants

Participants were considered at risk because they failed one or more of their traditional classes. They may have also been at risk due to being retained one or more grade levels. Most of the students who entered the credit recovery program were White males. Females also entered the program, but their numbers were smaller, and there were fewer Hispanics and African Americans enrolled. The demographics of the area

influenced these percentages. The location of the school was a predominately rural White community; 103 students volunteered for the study.

Procedures for Gaining Access to the Participants

I acquired institutional review board approval (IRB approval # 08-20-15-0158833) from the school and Walden University. Once that was completed, the procedures for gaining access to the participants included gaining permission from the superintendent of schools (Appendix D). Once permission was granted, I obtained student names from the school database and class records to identify students who participated in the A-Plus Learning System.

I contacted parents by mailing forms to their residences or by telephone. I hand delivered consent forms to students during nonacademic times. I also verbally explained the doctoral study I was asking them to join. The participants who agreed to join the study were instructed to take the forms home, have their parents review and sign them, and return them to me. For those who agreed to participate, parent forms, assent forms, and consent forms were provided. Some of the students were under the age of 18, and therefore required permission from their parents as well.

Instrumentation and Materials

Chionh and Fraiser (2009) stated the What Is Happening In the Classroom survey (*WIHIC*) was developed by combining several validated assessments. I combined the *WIHIC* and the Student Survey of the A+nyWhere Learning System, created Lee (2011), for this study. The study was designed to determine the effectiveness of the A+nyWhere Learning System by examining the relationships between the variables of student

achievement, classroom environment, active learning, student success, the motivation to stay in school, and attendance.

The instrument used for this study was a combination of the two surveys (Appendix A). The choices listed on the questionnaire range from: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree, and consisted of 65 questions. For both surveys, permission was granted by each of the authors (Appendices B and C). The A+LS Survey was created by Lee (2011) for her dissertation, *A+nyWhere Learning System Comparative Analysis of Direct Instruction and Online Learning Using the A+nyWhere Learning System in a Secondary Alternative High School*. The What is Happening in this Class questionnaire was developed by Fraser, Fisher, and McRobbie (1996). Chionh and Fraser (2009) explained it is a compilation of various validated instruments rolled into one.

This was a quantitative data instrument used to measure student perceptions and determine if associations exist between psychosocial characteristics of their classrooms and learning outcomes. From their choices on the instrument, I attempted to gain an understanding of student perceptions towards their relevance of learning, teacher support, student involvement, and student cooperation on the A+ny Where Learning System for credit recovery. The data from this instrument was collected electronically. The data was then converted to a Microsoft Excel spreadsheet where it was later input into SPSS for conversion to various formulas for calculation.

The variables were the achievement scores and attendance rates of the participants along with the adapted 4 attitude scales from the combined version of the *WIHIC* survey

(MacLeod & Fraser, 2009), and the Student Perspective Survey of the A+nyWhere Learning System (Lee, 2011). According to MacLeod and Fraser (2009) some examples of threats to internal validity included the selection of participants, history, maturation, testing, instrumentation, statistical regression, and attrition.

Chionh and Fraser (2009) discovered that equity, teacher support, and task orientation were correlated to attitude outcomes and student cohesion seemed to be the strongest variable of achievement. Chionh and Fraser (2009) suggested that from their collected data, classes that were more cohesive had higher test scores and classes where teachers were more supportive and organized had better self-esteem and attitude ratings.

Lee (2011) sought to discover if using an online curriculum was more effective than direct teaching. Lee's survey used a mixed-methods approach to data. She collected qualitative student perspective data from the survey and quantitative data from her participants. This included academic credits earned, number of absences, number of dropouts, and how many students graduated early. These would become her dependent variables along with teacher and student perceptions of the Alternative Graduation Program. The independent variable was the participation in the Alternative Graduation Program itself.

Validity and Reliability

The author of the A+LS Survey examined the validity and reliability with the assistance of a content validity panel that included school administrators and university professors. The statistics were established at 44.8 for the *Flesch Reading Ease* and at 12.1 for the *Flesch-Kinkade Readability*. National and international studies have been

conducted since 2003 using the *WIHIC*. A factor analysis of the survey supports the international validity of the *WIHIC*. Chionh & Fraser (2009) reported their *WIHIC* alpha reliability of the seven scales ranging from 0.88 to 0.95.

Cronbach's Alpha for each of the variables was determined using SPSS statistical software. For the classroom environment variable Cronbach's Alpha was 0.941. The second variable, active learning was 0.915. Student motivation, the third variable was 0.745, and the last variable, student success was 0.822. Cronbach's Alpha was calculated at 0.957 for the entire survey. The closer the alpha is to 1.0, the more reliable your measurement tool is.

Measures for Ethical Protections of Participants

The names and identities of the participants were kept confidential. Personal information, such as first and last name, and school identification number will be collected. All survey data was kept secure and stored for 5 years upon completion of the project. The participants were given the appropriate consent forms. All of the participants volunteered to be in the study.

This study required my interaction with individuals using the Internet. I gave directions to access and complete the survey. I did not oversee each participant but remained available to answer questions. To protect the participants, the project details and any potential risks were described in the consent forms. I explained their participation was completely voluntary and could be revoked at any time. I also provided a statement of confidentiality detailing how their information would be protected.

Data Collection

Data obtained for this research was collected by the researcher. Surveys were completed during nonacademic time. Achievement data was gathered from the State of Texas Assessments of Academic Readiness (STAAR) reports, and attendance data was obtained from the Public Education Information System (PEIMS).

I gathered data with the use of an online survey website that allowed for participants to follow a web-link to complete the survey. Participants were given access to the survey via the internet link, https://docs.google.com/forms/d/1dAPhnnuZ-k-L_RLQN3RDwwmyK1Nqa7IpLSCGMY-29sg/viewform?usp=send_form. Each student was matched by their school identification number when taking the survey so results could be tracked and correlated to achievement scores and attendance data. The survey was a combination of the What is Happening in the Classroom questionnaire and the Student Survey of the A+nyWhere Learning System. The survey consisted of 65 Likert-scaled questions and 2 questions that would assist the researcher in identification of the participant.

Permission was obtained from both authors to use and modify this project (Appendices B and C). The data collected from this survey was intended to examine factors affecting student learning in a credit recovery program for secondary students. The participants selected for this project have participated in the credit recovery program at various times of the year from 2015 to 2016.

Data Collection Choices and Justification

The reason for the use of the combined surveys was to examine the relationships between student achievement, classroom environment, active learning, student success, the motivation to stay in school and attendance for students in the A+nyWhere Learning System. I theorized by combining and modifying the 2 surveys the relationship between the variables of classroom environment, active learning, student motivation to stay in school, and student success would be revealed.

The questions developed for this project pertain to areas that include student support for one another, support from teachers, and classroom interest. These questions may also determine the levels of problem solving skills and investigative processes used in the class. They also address the classroom equality and cooperation.

The interest of this project is to determine factors affecting student learning in a credit recovery program for secondary students by examining the relationships between the variables of student achievement, classroom environment, active learning, student success, the motivation to stay in school, and attendance for students in the A+nyWhere Learning System. Today, schools are moving away from traditional teaching pedagogies and incorporating updated strategies that focus on student-centered learning rather than teacher-centered lessons. Previous studies indicate that student relationships with teachers and the school environment have a profound impact on the success of students (Lee, 2011).

Implementing the Study

The timetable for this study began by collecting data for students who were in the credit recovery program during the 2015-2016 school year. Stage 1 included acquiring appropriate permission from the IRB, the school district superintendent, and completing the literary research to conduct the survey accurately. Stage 2 required identifying possible candidates for participation and contacting them. The third stage was to collect the survey data and apply it to SPSS software for analysis.

The goal for collecting data was to have students use a web-link to gain access to the project survey. As the data was collected, it was converted from Microsoft Excel to SPSS to perform the analysis.

Role of the Researcher

I collected data for this research. The participants were given internet access to complete the survey online. I am an Assistant Principal at the study site and an advocate for the credit recovery program. Students were able to complete their surveys during nonacademic time. All participants were informed their data would be kept confidential.

Data Analysis

The goal for this study was to have 100 students complete the survey. I had 103 participants. Response bias (Creswell, 2008) should not play a factor in this study. A descriptive analysis of each of the variable's means, range of scores, and standard deviations was calculated. A correlation analysis was conducted with the achievement scores from the State of Texas Assessments of Academic Readiness (STAAR), attendance data from the Public Education Information Management System (PEIMS),

and the score totals from the *WIHIC* to determine the effectiveness of the A+nyWhere Learning System as a credit recovery program and its relationship to student achievement, classroom environment, active learning, attendance, and student success. The results were based on feedback from the survey, academic performance data from the State of Texas Assessments of Academic Readiness (STAAR), and attendance data from the Public Education Information System (PEIMS).

SPSS added the scores of each question, as documented by each participant. Scores were also added up for the standardized test results that included Algebra, English, and Biology. These are the 3 standardized exams all of the participants had taken at the time of the study. Attendance data was each participant's average daily attendance for the 2015 - 2016 school year. Using this data descriptive statistics were generated using SPSS. The mean and standard deviations were projected for each variable. For the correlational analysis, *Pearson's* correlation ranged from -0.10 to 1.00, while the covariance went from -2.014 to 1225.784.

Cronbach's Alpha for each of the variables was determined using SPSS statistical software. For the classroom environment variable *Cronbach's Alpha* was calculated at 0.941. The second variable, active learning was calculated at 0.915. Student motivation, the third variable was determined to be 0.745, while the last variable, student success was measured at 0.822. The closer the alpha is to 1.0, the more reliable the survey.

Previous studies showed the alpha reliability coefficients for three attitude scales ranged from 0.79 to 0.83, with individual students as the units of analysis (MacLeod & Fraser, 2009). However, the class mean for the alpha reliability coefficient for attitude

scale was higher. The alpha reliability coefficient for individual students was 0.86 and 0.88 (MacLeod & Fraser, 2009). With the class mean as the unit of analysis, the alpha reliability coefficient for self-esteem ranged from 0.90 to 0.93 (MacLeod & Fraser, 2009). Achievement was another student learning outcome that was investigated. The alpha reliability for this study was calculated at 0.962.

The *WIHIC* was also able to measure outcome measures such as attitude and self-esteem by using class and student means. Correlations can also be determined by use of bivariate correlations and multiple regression analysis to determine the perception of the classroom learning environment (Chionh and Fraser, 2009). Chionh and Fraser (2009) found a statistically significant difference ($p < 0.05$) between attitude and self-esteem. Their sample size consisted of 75 classes of mathematics and geography, which included 2310 students. Chionh and Fraser (2009) summarized that the classroom environment linked with high achievement of examinations was different from higher scores associated with the results of self-esteem and attitude.

Based on the analysis of the data, null hypothesis 1 which states there is no relationship between student achievement and the classroom environment amongst high school students who are or were in the A+nyWhere Learning System can be accepted. Null hypothesis 2 can also be accepted. It states that there is no relationship between student achievement and active learning of students enrolled in the A+nyWhere Learning System. Null hypothesis 3 states that there is no relationship between student motivations to stay in school and school attendance rates. This hypothesis can be accepted. Null hypothesis 4 states that there is no relationship between student achievement and student

success due to being enrolled in the A+nyWhere Learning System versus a traditional direct learning classroom setting. This can also be accepted. The data was collected and analyzed once the IRB gave approval to proceed. After the participants completed the survey the data was imported from an Excel program to SPSS software for analysis.

The data determined the frequency of the answers, producing means and standard deviations for individual question. A correlation analysis was conducted with the achievement scores from the State of Texas Assessments of Academic Readiness (STAAR), attendance data from the Public Education Information Management System (PEIMS), and the score totals from the *WIHIC* to determine the effectiveness of teachers in the classroom from those enrolled in the credit recovery program. Scores from the survey determined if student's respond differently to traditional classroom environments than from a computerized A-Plus Learning System environment. SPSS added the scores for each question. The data analysis was categorized by variables. The classroom environment incorporated questions 1 – 32. Active learning was determined from questions 33 – 56. Questions 57 and 58 were relevant to student motivation to stay in school. Student success was determined with questions 59 to 65. Standardized test scores were from Algebra, English, and Biology. Attendance data was each participant's average daily attendance for the 2015 - 2016 school year.

Assumptions

It was assumed that all of the participants voluntarily entered into the credit recovery program and their parents were aware of their student's educational status. It was also assumed that the underclassmen who participate in the program were enrolled so

they may recover failed classes. It is also assumed that the participants of this study were to respond to the research instruments honestly and whole-heartedly, based on their intrinsic feelings for school and their perception of the school's environment.

Limitations of the Study

All core classes of Mathematics, Science, English, and Social Studies are offered on the A+LS online learning system. The students who worked in the credit recovery program have been accustomed to a more traditional style of teaching, where educators used teacher-centered lessons with lecture, rote, and memory strategies during direct instruction time.

The campus experienced administrative changes at the start of the 2015 -2016 school year. The credit recovery program also changed locations from the disciplinary school to the high school in an attempt to give students more access to teachers. These changes may be limitations of the study.

Scope and Delimitations

The scope of this study included data that assessed factors affecting student learning in a credit recovery program for secondary students. The reason for this project was to determine teacher classroom effectiveness from students enrolled in a credit recovery program. A delimitation of this research was that it focuses only on one rural school. It does not include information from other schools that use similar computer-based learning programs. Students in the credit recovery program are allowed to work at their own pace. It is possible that they may not complete the program by the end of the school year. This may be another delimitation.

Ethical Considerations

The superintendent of schools approved the research study. Some of the participants were over the age of 18 and gave their own consent to participate. Students who were 17 or younger were given appropriate consent and permission letters. The researcher disseminated information describing the project, its procedures, and participant confidentiality. The reasons for implementation of the project and contact information was provided to give participants an opportunity to ask questions. All information was kept confidential and in a secure location. Each individual's participation was voluntary and they could withdraw at any time.

Data Analysis Results

Correlational Statistics

For research question (RQ) 1, there was no direct relationship between the classroom environment and total achievement variables at $r(101) = .067, p = .250$. There were also no direct relationships in RQ 2 and RQ 4. The variables for RQ 2 are active learning and total achievement $r(101) = .082, p = .204$. The variables for RQ 4 are student success and total achievement $r(101) = .050, p = .307$. There was no correlation between the variables of student motivation and attendance $r(101) = -0.100, p = .157$.

Cronbach's Alpha for each of the variables was determined using SPSS. For the classroom environment variable *Cronbach's Alpha* was calculated at .941. The second variable, active learning was calculated at .915. Student motivation, the third variable was determined to be .745, while the last variable, student success was measured at .822.

Descriptive Statistics

A total of 103 student surveys were completed for this study. All surveys were completed in their entirety. In order to complete the data set, I imputed the mean for the Algebra I scores to complete the data for 10 students who did not have State of Texas Assessment of Academic Readiness (STAAR) scores. I also imputed the mean in the dataset for 11 students for Biology I, and 13 students who did not have scores in English I. There are multiple possibilities as to why these students did not have scores. One reason is they may have been exempted due the Special Education Individual Education Plans. During an Admission, Review, and Dismissal Committee Meeting (ARDC) a group of teachers, the parent or guardian of the child, administrators, and diagnosticians make the decision to accept a failing score as passing. They may also exempt the student from taking the test because he or she may not be receiving the Texas Essential Knowledges and Skills (TEKS) at their current grade level. In the State of Texas, students must take and pass 5 STAAR exams successfully to meet graduation requirements. For this study, I used data from the first 3 exams they take because Algebra I, English I, and Biology I were common for students to take as freshman in high school. The remaining exams students take to graduate include English II and United States History.

The first research question (RQ) asked, for students in the A+nyWhere Learning System, what is the relationship between student achievement and student perceptions of classroom environment? The mean for the classroom environment variable of RQ 1 was 111.9 with a standard deviation of 20.7. The skewness of the classroom environment was -0.5, while the kurtosis was 0.4. These measurements indicate the distribution of all the

collected data was normal. The total achievement score mean was 11197.7, while the standard deviation was calculated at 895.9. The skewness of this variable was -.2 and the kurtosis was 1.4. For question 1, there was no direct relationship between classroom environment and total achievement variables ($r = .067$).

Table 1

Descriptive Statistics (RQ1)

	Mean	Std. Deviation	N
Class Environment	111.9515	20.77582	103
Total Achievement	11197.7864	895.94536	103

Table 2

Correlation Statistics (RQ1)

		Class_ Environment	Total_ Achievement
Class Environment	Pearson	1	.067
	Correlation		
	Sig. (1-tailed)		.250
	Sum of Squares and Cross-products	44026.757	127783.932
	Covariance	431.635	1252.784
	N	103	103
Total Achievement	Pearson	.067	1
	Correlation		
	Sig. (1-tailed)	.250	
	Sum of Squares and Cross-products	127783.932	81877245.301
	Covariance	1252.784	802718.091
	N	103	103

The second RQ asked, for students in the A+nyWhere Learning System, what is the relationship between student achievement and student perceptions of active learning? The mean for active learning was 82.7. The standard deviation was 15.0. The skewness for active learning was -.3 and the kurtosis stood at .9, thus indicating a normal distribution. The descriptive statistics for the total achievement scores remained the same as they were for RQ 1. No direct relationship was determined for research question (RQ) 2, active learning and total achievement ($r = .082$).

Table 3

Descriptive Statistics (RQ2)

	Mean	Std. Deviation	N
Active Learning	82.7476	15.06113	103
Total Achievement	11197.7864	895.94536	103

Table 4

Correlation Statistics (RQ2)

		Class_ Environment	Total_ Achievement
Active Learning	Pearson Correlation	1	.082
	Sig. (1-tailed)		.204
	Sum of Squares and Cross-products	44026.757	113317.447
	Covariance	226.838	1110.995
	N	103	103
Total Achievement	Pearson Correlation	.082	1
	Sig. (1-tailed)	.204	

Sum of Squares and Cross- products	113317.447	81877245.301
Covariance	1110.955	802718.091
N	103	103

Research question 3 asked what is the relationship between student motivations to stay in school and attendance? The mean for student motivation was calculated at 7.7, while the standard deviation was 2.0. The skewness was identified as -.9, with a kurtosis reading of .4. The mean for the attendance variable was 89.9 and the standard deviation was 9.9. The skewness for attendance was -2.4, while the kurtosis was 8.2. For this question, there was no correlation between the variables of student motivation and attendance ($r = -0.100$).

Table 5

Descriptive Statistics (RQ3)

	Mean	Std. Deviation	N
Student Motivation	7.7573	2.02177	103
Attendance	89.9029	9.94940	103

Table 6

Correlation Statistics (RQ3)

		Student Motivation	Attendance
Student Motivation	Pearson	1	-.100
	Correlation		
	Sig. (1-tailed)		.157
	Sum of Squares and Cross-products	416.932	-205.427
	Covariance	4.088	-2.014

Attendance	N	103	103
	Pearson	-.100	1
	Correlation		
	Sig. (1-tailed)	.157	
	Sum of Squares	-205.427	10097.029
	and Cross-products		
	Covariance	-2.014	98.990
	N	103	103

Research question (RQ 4) asked, for students in the A+nyWhere Learning System, what was the relationship between student achievement and student perceptions of student success? The mean for the first variable of this question was 26.5. The standard deviation was 5.5, while the skewness was -.9 and the kurtosis was 1.0. The total achievement statistics were identical to those of RQ 1 and RQ 2. There was no direct relationship for the variables of student success and total achievement ($r = .050$).

Table 7

Descriptive Statistics (RQ4)

	Mean	Std. Deviation	N
Student Success	26.5631	5.55131	103
Total Achievement	11197.7864	895.94536	103

Table 8

Correlation Statistics (RQ4)

		Student Success	Total Achievement
Student Success	Pearson	1	.050
	Correlation		
	Sig. (1-tailed)		.307
	Sum of Squares	3143.340	25502.388

Total Achievement	and Cross-products		
	Covariance	30.817	250.023
	N	103	103
	Pearson	.050	1
	Correlation		
	Sig. (1-tailed)	.307	
	Sum of Squares	25502.388	81877245.301
	and Cross-products		
	Covariance	250.023	802718.091
	N	103	103

Summary of Findings

I found no relationships between the variables in this study, as they tie to student achievement and attendance, I have also discovered a reliability in each of the variables examined. With a *Cronbach's Alpha* reliability ranging from .745 to .941, I can report that teacher strategies may affect the classroom environment, active learning, student motivation, and student success.

Classroom environment questions focused on relationships between students, as well as the relationship teachers build with students. This variable also focused questions on teacher questioning strategies that empowered learning and activated higher order thinking skills of students. It also questioned the climate and cooperation within the classroom and among peers. *Cronbach Alpha* for the classroom environment variable was calculated at .941, making this portion of the survey reliable and will direct my professional development towards teaching constructivist teaching methods while maintaining the state standards of the Texas Essential Knowledge and Skills. Teaching

student-centered lessons that activate student's prior learning and are relevant, will promote a positive classroom climate for students to engage in and academic success.

The active learning variable geared questions towards the openness and engagement of activities in the classroom. The variable also asked questions regarding goals set by the teacher and student, as well as preparedness, attentiveness, and understanding of expectations. The reliability for this variable was determined to be .915.

Student motivation to stay in school was the third variable with a *Cronbach Alpha* of .745. This part of the survey targeted student attendance and the motivations from class to attend regularly, while enrolled in the Credit Recovery Program.

The last variable focused questions on the instructional practices and student success of those enrolled in the Credit Recovery Program. The reliability of this part of the survey was calculated at .822. It is the focus of this study to determine the A+nyWhere Learning System's effectiveness as a credit recovery program. The process of sit and get, self-paced, and self-motivated program is not one that promotes student-centered learning or constructivist learning methods. The proposed professional development as the project deliverable will address this matter.

The local problem for this school, was the increased number of students completing online courses to acquire academic credits to graduate through a credit recovery program and the factors affecting student learning in a credit recovery program for secondary students. For students in the A+nyWhere Learning System, what is the relationship between student achievement and the classroom environment (RQ1)? For students in the A+nyWhere Learning System, what is the relationship between student

achievement and active learning (RQ2)? For students in the A+nyWhere Learning System, what is the relationship between student motivations to stay in school and school attendance rates (RQ3)? For students in the A+nyWhere Learning System, what is the relationship between student achievement and student success (RQ4)?

All of the calculations acquired from the survey indicate no relations among all of the variables, thus allowing me to accept all of the null hypotheses. The questions within the survey are gauging teacher effectiveness in the classroom. The questions also elude to constructivist methods of teaching and learning. The adapted *WIHIC* survey I used to collect this data asked students to rate their own involvement, equity, cohesiveness, task orientation, cooperation, investigation, and teacher support in the classroom.

For research question (RQ) 1, there is a no direct relationship between the classroom environment and total achievement variables at $r(101) = .067, p = .250$. There were also no direct relationships in RQ 2 and RQ 4. The variables for RQ 2 are active learning and total achievement $r(101) = 0.082, p = .204$. The variables for RQ 4 are student success and total achievement $r(101) = .050, p = .307$. There were no correlations between the variables of student motivation and attendance $r(101) = -.100, p = .157$.

From these findings, the classroom environment may not be conducive to learning for students. It is recommended that teachers use constructive strategies to engage students in more hands-on learning that is relevant to them and may have a positive impact on their performance. This data would suggest that there may be little student involvement, equity, cohesiveness, task orientation, cooperation, investigation, and teacher support in the classroom.

The theoretical framework for this study was from Piaget's (1952) constructivist theory of learning. This theory states learning is based on inquiry. Students must be actively engaged in acquiring knowledge that promotes success. The constructivist approach draws on the prior knowledge, skills, and the beliefs of students, while synthesizing new understandings from prior learning and information. The constructivist theory is established on the idea that children construct their own knowledge collectively and individually based on their experiences. I discovered no relationships between all of the variables. It is possible that teacher classroom effectiveness can be improved with professional development training with the use of constructivist teaching methods. I have found in this research that it is likely that teacher-centered lessons may have a negative effect on student achievement, the classroom environment, active learning, school attendance, and student success. Prior research using the *WIHIC* is consistent with my findings.

The project deliverable I propose would be ideal to teach educators how to instruct and engage students in more hands-on constructivist teaching styles. By conducting this professional development, where teachers are leaders and are creating curriculum that meets Texas' state standards, this would provide for buy-in from the stakeholder and establish accountability for all. Implementing the use of the Texas Essential Knowledge and Skills along with the scope and sequence from the A+anywhere Learning System to create more student-centered lessons, may reduce the number of students who fail classes and enroll in the credit recovery program. The recommendation and potential for positive change is to offer teacher professional development using

constructivist teaching strategies to motivate students and increase attendance. This will empower student learning and make learning more relevant. This also implies more student involvement will improve attendance, grades, academics, and graduation rates.

Project Deliverable

The initial reason for the study was to determine teacher classroom effectiveness from students enrolled in a credit recovery program. I wanted to examine factors that impact student learning in a credit recovery program and to determine whether teachers were implementing student-centered instruction. I have watched the education system pendulum swing from one extreme to the other. The history of state assessment in Texas all began with a basic skills test in 1979. In 1980, Legislation adopted the Texas Assessment of Basic Skills test (TABS). The Texas Educational Assessment of Minimum Skills (TEAMS) exam was implemented and a passing score was required to earn a diploma in 1986. In 1990, the Texas Assessment of Academic Skills (TAAS) was introduced. A more comprehensive criterion-referenced exam was developed in the Texas Assessment of Knowledge and Skills (TAKS) in 2003. For the 2011-2012 school year, the Texas Legislature decided to implement the State of Texas Assessments of Academic Readiness (STAAR). High school students were to take 12 End-Of-Course (EOC) exams. These included English I, II, and III, Algebra I, Geometry, Algebra II, Physics, Biology, Chemistry, World History, World Geography, and United States History. A passing grade in all of these exams was required in order to receive a diploma. This number of exams was short-lived and within a year's time. Graduation requirements of STAAR was reduced to 5 exams.

As of the 2013-2014 school year, the Commissioner of Education has adopted Senate Bill (S.B.) 149 from the Texas Legislature. S.B. 149 is designed to allow schools to create Individual Graduation Committee's (IGCs) to award graduation diplomas for those who cannot pass 2 of the 5 STAAR exams required to graduate.

Based on the reliability of the survey I can validate that classroom environment, active learning, student motivation, and student success may rely on the process of teaching strategies in the classroom. This study shows there is no relationship between the variables of student achievement and classroom environment, active learning, attendance, and student success. From these findings, the present classroom environment may not be as conducive to learning. The findings also suggest if students are being subjected to teacher-directed lessons that do not engage students in more hands-on learning that is relevant to them, a change in instructional approach is needed.

I propose a professional development project deliverable that focuses on constructivist teaching methods to share with the faculty and central office administration during staff development meetings. The superintendent, various program directors, teachers, and para-professionals may be in attendance. My presentation would include the brief history of the local problem and the current overall results of the credit recovery program to date. I would also present the reason behind my research study, the survey tool used to gather data, and the results of my study. I would recommend a future mixed methods exploratory investigation to discover why the program is not as effective on student performance and an additional cost benefit analysis. By conducting this project deliverable, my goal is to examine factors that impact student learning in a credit

recovery program and to determine whether teachers were implementing student-centered instruction.

Conclusion

The purpose of the study was to determine teacher classroom effectiveness from students enrolled in a credit recovery program. The success of the research can be determined by the data that supports or does not support that student-centered teaching is occurring in the classroom, and is important in the classroom. The research success was also dependent upon the results of students who agree or disagree that online learning has prepared them for life after graduation.

In section 2, I described the survey research study and the instrument used to gather data on the students. The setting and sample of participants was described. Reliability and validity was discussed. The research questions investigated the nature and strength of the relationships among the classroom environment, active learning, the motivation to stay in school, and student success. The data collection, analysis, assumptions, limitations, scope, delimitations, and ethical considerations were provided. The results of the study will be shared as a project deliverable professional development module with the superintendent, various program directors, teachers, and para-professionals at a district staff development session. A summary of the relationships between classroom environment, active learning, student motivation, and student success will be explained to increase student performance with the use of a constructivist teaching methods delivered during teacher professional development.

Section 3: Project Deliverable

The project deliverable was a professional development training that focused on the constructivist theory of learning and other alternatives to the A+nyWhere Learning System. I shared the results of the study in a professional development module with the superintendent, program directors, teachers, and para-professionals at various district staff development sessions. In my study, I found no relationships exist in the variables that involved student achievement and what was occurring in the classroom. I also discovered no correlation between student motivation and attendance.

One goal for this project deliverable was to train teachers to use strategies that include constructivist learning models. Other goals were to teach teachers how to rewrite curricula for the site school's learning lab, and use existing software resources to aide in credit recovery. The last goal was to use existing and emerging software programs on the market.

The overall goal of the project deliverable was to improve teaching methods and strategies by incorporating constructivist learning theory. The intent was to teach teachers to use their experiences in the classroom and model for students through their teaching strategies these characteristics that would improve student academic success and attendance. The goal was to empower teachers to exhibit and model responsibility for students in hopes that they would follow. With this professional development, my objective was to assist the district stakeholders in realizing the need for more analysis of the district's goals to minimize the number of student dropouts.

Rationale

Based on my research data, the A+nywhere Credit Recovery Program at this school must be re-evaluated. Students have not been successful on state assessments after having been in the program, it does not promote daily attendance, and it does not motivate students to be successful. Finding also indicated that the classroom environment and the active learning in the class needs to be improved to promote active learning.

I chose to conduct professional development training over a white paper as a project deliverable. A white paper would have presented the big picture with a proposed solution however; professional development training was more appropriate for the target audience. Training allowed me to model for teachers what is expected in the classroom. Professional development training allowed for a more detailed and refined look at solutions to the problem. Based on the findings reported in Section 2, this also allowed me to address the goals of the professional development using the constructivist learning theory. The project deliverable enabled me to review suggestions to solve the problem. These included the addition of new curriculum developed by teachers, the addition of existing resources in the form of available software not used in the past, and the option of purchasing new software programs that would allow for students to recover credit. Examples of these new software programs include FuelEducation (2016) and GradPoint (2016).

Review of Literature

History of Professional Development

Educational reform in Texas began in the early 1980s. According to Veselka, Tackett, and Wood (1991), House Bill 72 was enacted to implement a formal teacher appraisal system that would require participation in a set number of in-service hours per year. The State of Texas began to appraise teachers with the Texas Teacher Appraisal System (TTAS) in 1984 (Veselka et al., 1991). The Texas Education Agency (2004) in its executive summary stated that in 1994 the teacher appraisal system had been redeveloped into the Professional Development and Appraisal System.

Over the last two school years, the state has been conducting pilot studies on a new teacher evaluation system called the Texas Teacher Evaluation and Support System (T-TESS). The official start date for T-TESS was the 2016 school year. The Texas Education Agency (2016d) suggested there should be continuous training for teachers that instructs teachers to make academic decisions for students based on data and to incorporate teaching that is student centered. The TEA also mandated community collaboration among teachers where they maintain and assess their learning over time while also being responsible for that learning.

Roof (2015) suggested that teacher education programs of the 1940s were founded on social principles. Roof (2015) also stated that these programs then moved toward a revisionist theory of programming as the education system went from religious to private control, and thus became more bureaucratic during the 1970s and 1980s.

During the 1990s teachers enjoyed various types of workshops. According to the Organisation for Economic Co-operation and Development (2009), these include subject specific work, conferences, teacher observations and collaborations, research, mentoring, and group book studies.

Genre for Problem and Criteria of Research From Constructivist Theory

McLoughlin (2012) stated that the way to maintain teachers' knowledge and academic content is through adequate teacher education programs. As teacher appraisal systems have changed over time, so have the professional development models. The new teacher training programs are geared toward the constructivist model of teaching and learning.

The training of teachers using professional development is the most common method used to promote advancement (Simpson, 2016). Bambrick-Santoyo (2013) suggested that effective professional development needs to have an objective and not be abstract. The Professional Development Appraisal System could be considered subjective in its evaluations, whereas the new T-TESS appraisal system is goal and objective orientated. Feiman-Nemser (2012) suggested ongoing professional development is most effective in the improvement of teachers' advancement of skills. The complex work of teaching students is something that must be learned over time. As in other professions, teachers should have on-the-job training as they go through the year (Grossman & Davis, 2012). Gulamhussein (2013) argued that those who deliver professional development understand how to create new methods of learning for teachers.

In my project deliverable, I teach teachers using constructivist theory to assist them in developing their understanding of teaching and learning through their experiences. I have teachers use their knowledge of the credit recovery system and their knowledge of State of Texas Standards, the Texas Essential Knowledge and Skills (TEKS) to rewrite curriculum as part of the credit recovery program. By modeling for teachers, I give them strategies based on this theory that they can use in their classrooms to improve academics and attendance. I also review existing resources on campus that may accompany the rewritten curriculum. It may also be determined, after reviewing the current software for some subjects such as Spanish I & II, that this could be a viable alternate solution to credit recovery. Another constructivist strategy I use with teachers is to call upon their prior knowledge of other purchasable programs for the campus to replace the A+nyWhere Credit Recovery System.

Connections Between Theory and Research

The Association for Supervision & Curriculum Development (ASCD, 2014) found that coaching during the year will allow for teachers to transfer their skills with 95% success. The ASCD also found that teacher training is most effective when it is continuous. Lehiste (2015) found that continuous training of teachers will increase the confidence in teachers, thus enhancing their self-efficacy. Hirsh (2015) found that teachers must be reflective of their teaching strategies to increase their professional growth. Hooks (2015) suggested that school administrators in professional development training should model for their teachers what they expect their teachers to model to students in the classroom. Riegler and Steffe (2014) argued that, according to

constructivist theory, a learner's previous experience shapes his or her learning. Having a district administrator as the presenter of this professional development will provide the modeling necessary to teach teachers how to use prior knowledge in the classroom to redevelop curriculum and provide previous experiences with software available on campus and for purchase to enhance the learning and attendance of students. The engagement and collaboration that will take place will provide teachers with a new perspective of expectations and opportunities to view their new teacher training (Ultanir, 2012).

Future goals would be to use learning data from students, and ongoing feedback would be provided during various training days to monitor progress. Adjustments would be made to curriculum as needed based on the knowledge of the teachers from gathering data of students.

This project deliverable has the same characteristics of an instructional model called formative instructional practice (FIP) which originated from the assessment for learning theory (Stiggins, 2008). Collins and Liang (2015) indicated the FIP model is made up of (a) learning targets that are clear, (b) student learning data collected over time, (c) feedback provided effectively, and (d) by teachers facilitating student ownership of learning.

The Journal Plus Education Group (2015) stated that new professional standards offer support in the area of adaption and reflection. Cox (2015) found, if teachers are given the opportunity to interact with other teachers, this will promote teachers' growth. Barrett, Cowen, Toma, and Troske (2015) agreed that to improve teacher effectiveness,

professional development in-service must be used. Sharif and Cho (2015) suggested that for teachers to respond to all the changes involved in the new teacher appraisal system, they should strive for continuous learning and also adopt collaborative practices where they can exchange effective teaching strategies. Cash (2013) found that teacher training that focuses on expanded understandings to develop the necessary tools to support students is founded on the idea of the constructivist theory.

Yettick (2015) suggested that concept progressions were a way for teachers to provide direction to promote students' progress toward educational goals in the classroom. The United Kingdom and Australia already implement these academic strategies in their educational system. The U. S. Department of Education (2016) has also seen the need for improved teacher training. Tatto et al. (2016) found that the U. S. Department of Education has set key indicators to newly proposed regulations on teacher preparation and continued education. Tatto et al. (2016) stated that a key indicator of improvement for teachers will be determined by the measure of student growth in the classroom. This will allow students the opportunity to be held accountable for managing their academic learning through an organized and safe learning environment (Hakan & Balci, 2015).

At the start of the 2017 school year, the study will incorporate the paradigm shift of the constructivist theory of learning that will promote a new mind-set of how students learn and necessitate new teaching strategies (Irez & Han, 2011). I will accomplish this by teaching teachers to readjust curriculum to align with TEKS, and by providing teachers an opportunity to use their previous knowledge to contribute to the credit

recovery program. I will also elicit teachers' knowledge of current and available curriculum software on campus, which can be used to improve student academic success and attendance in the credit recovery program. I will also explore teachers' knowledge of new computer software that may be purchased should the district have the funds to provide an alternative solution to the problem.

Search Terms and Efforts

The search process for this project included terms such as *history of teacher professional development, constructivism, teacher in-service, teacher education, educational change, and educational reform. Other terms included Alternative school, student centered learning, teaching strategies, change agents, dropouts, engagement, care, and empathy.* The locations searched included the Texas Education Agency and U. S. Department of Education websites, and Walden library's dissertation and database resources, which included Education Research Complete and ERIC. I also used the Google Scholar search engine. Table 9 shows the results of my search.

Table 9

Resources

Number of Sources before 2012 (% of total)	Number of Sources from 2012 forward (% of total)
36 Sources (36%)	64 Sources (64%)

Project Description

For the project deliverable, I would train teachers to use their knowledge to rewrite curricula for the credit recovery program that would be aligned with TEKS. This may improve academic performance on state assessments and attendance. I would also train teachers to use their knowledge to implement current software available on campus as a supplement to, or replacement for certain subjects in the credit recovery program such as Spanish I & II, English I - IV, Government, Economics, Algebra I, and Geometry. I would also work with teachers to find alternative computer programs available for purchase. I will ask teachers to brainstorm using existing software available to use in the rewrite of curriculum. I will engage teachers' initiative to develop an alternative curriculum that will align with constructivist learning theories. I will also model constructivism for teachers.

Needed Resources and Potential Barriers

A resource that will need to be allocated will be money. Other resources and potential barriers include time, and personnel. In order to consider a change in the credit recovery program we must consider the training and manpower. One resource available to tap into would be the Education Foundation group that exists in the community. This group is dedicated to raising money that provides teacher grants. These grants are available for sustainable student programs and projects in the classroom.

Time is another factor to consider. This professional development will be delivered at staff meetings before and after school. It will also take place on designated staff development days throughout the year. At this site teachers have multiple

responsibilities with extra-curricular activities. Getting them all in one place at the same time can be difficult.

I am currently in charge of the credit recovery program. There is one teacher who is assigned to the class. A goal would be to add department chairs as part of the leadership team to monitor and maintain the credit recovery program. Then this venue could be used as a formative assessment of teachers once they are assigned to monitor and maintain the credit recovery program.

Implementation and Timetable

The start of a new credit recovery program would be during the 2017 – 2018 school year. This would allow time for the professional development and budget amendments to be made. This would also allow for more research to determine if the district is meeting its goals.

Roles and Responsibilities

It is the responsibility of the principal to work with the superintendent to allocate funds for a new credit recovery program. Once a program is in place students would be responsible for completing all of the lessons for each subject in a timely manner. This would allow the school to maximize the number of students it can process through the courses to complete the requirement of graduation credits. The role of the teacher would be to monitor student progress and process grades. The role of the department chairs would be to apply for grants and monitor teachers. My responsibility would be to conduct formative assessments on the teachers and department chairs.

Project Evaluation Plan

The goals for this project deliverable are to train teachers to use strategies that require constructivist learning models, teach teachers how to rewrite curricula, use existing software resources, and research new software programs. The evaluation of the professional development will be determined with formative assessments of the teachers and based on summative student academic progress.

Academic reports occur every 3 and 6 weeks. Formative and summative assessments may be conducted in the form of benchmark exams. The State of Texas conducts end of year Exams named STAAR. These scores may be an indicator of academic success. Evaluations may be conducted on the new curriculum that is developed for the credit recovery program, which can be monitored by the completion rates of students in the program. The current software has grade monitoring capabilities to record student academic progress. Student attendance will continued to be monitored. The formative and summative assessments are justified due to the schools' accountability to the state for academic recognition.

Project Implications and Importance

New teaching strategies may affect all stakeholders. My findings indicate we may observe an increase in student's achievement, the classroom environment, active learning, student success in the classroom, students' motivation to stay in school, and attendance. The new curricula may allow students to earn credits for courses not currently offered by the district.

The new curriculum may offer multiple foreign languages. Other electives may also be available. As alternative courses become available students may improve attendance and academics. These changes may affect the site school by increasing the attendance rates, improving academics, and increasing graduation rates. Producing more graduates may provide the community with a stronger workforce and post-secondary students.

Section 4: Reflections and Conclusions

Project Strength and Limitations

The greatest strength of this project study was the number of individuals who were willing to participate. Of the 110 students who met the criteria, 103 were willing to complete the survey. This sample size ensured that results were trustworthy. Including only one school was a limitation to the project study. Having more schools could possibly provide different results.

Another project strength was in the fact that teachers are lifelong learners and are ready to experience new teaching techniques. Alajmi, Al-Dafiri, and Shammari (2016) stated that teacher training and learning are complimentary to one another, and teachers seek to improve knowledge and skills necessary to enhance educational programs. One limitation of the professional development project was that most of the teachers employed at the school have dual roles as coaches. Therefore, getting teachers/coaches to attend training sessions can be difficult. Even though teachers should prioritize student academics, Saffici (2015) indicated that teachers who are also coaches have the tendency to focus more on the aspects of coaching than teaching. This type of situation is a limitation in the education field.

Recommendations for Future Studies

Future research questions may include the following:

1. How do faculty promote a positive relationship between student achievement and student perceptions of classroom environment?

2. How do faculty promote a positive relationship between student achievement and student perceptions of active learning?
3. How do faculty promote a positive relationship between student motivations to stay in school and school attendance rates?
4. How do faculty promote a positive relationship between student achievement and student perceptions of student success?

Answering these questions would require a qualitative study that would include data gathered from students and teachers. Future quantitative studies could include other school districts of similar size and demographics, and perhaps the entire student body and staff members.

Alternate definitions of the problem could include apathy and entitlement. Apathy refers to lethargy, lack of motivation, or lack interest. Entitlement refers to rights to passing grades. Alternative solutions to this problem would be changing campus climate, culture, and mind-set. This could be accomplished with alternative curricula written by teachers to meet Texas requirements for graduation. It could also be accomplished through diligent work with the community to identify resources available and those that can be obtained with research and financial support.

Scholarship, Development, and Leadership Change Project

In this project study, I found that classroom environment, active learning, achievement of students, student motivation, and student attendance had no bearing on the reasons at risk students are not successful in the class of the target school. Other

factors may play a part in the dropout rates. To discover these factors, another study should be conducted widening the scope of participants.

The study findings allowed me to train teachers on setting professional goals for themselves and academic goals for their students. However, as with most teacher professional development, teachers find change difficult. They may they refuse to change their methods of teaching and learning. Flumerfelt and Green (2013), found that professional development is a way schools seek to effect change. However, Flumerfelt and Green also discovered that schools have difficulty sustaining improvement with this practice. Lehiste, (2015) recommends long term repetitive professional development and classroom observations to ensure constructivist teaching strategies are implemented.

To reflect on what I have learned from this research study, I have found the present classroom environment may not be conducive to learning and students are being subjected to teacher-directed lessons that are not relevant. A change in instructional approach is needed. The findings of this project study support more teacher constructivist training to improve student achievement, the classroom environment, active learning, school attendance, and student success. Other factors may play into the perceptions students have that attribute to their lack of academic success. This project study has engaged my thought processes to consider other factors that may cause the dropout phenomenon that may be addressed in a different study. The study has prompted me to reflect on my role as an administrator and ask what I must do to assist teachers in reaching their goals and assist students in reaching theirs. This led to the development of

ongoing professional development training to encourage teachers to take an active role in the credit recovery program at the site school.

Reflection on the Importance of the Work

The purpose of this study was to examine teacher classroom effectiveness and the reasons students drop out of school or elect to graduate in an alternative educational program. I learned that classroom environment, active learning, achievement of students, student motivation, and student attendance had no relationships with each other. Future researchers may use different questions on teacher and student qualitative surveys. To decrease dropout rates, researchers must identify the factors causing the dropout phenomenon to ensure the success of the students in the local community. It will also be important to improve teacher effectiveness in the classroom by implementing student-centered lessons with constructivist teaching styles. Although the relationships were non-existent, the push to move toward constructivist teaching may lower student failure and improve student success (McLoughlin, 2012).

Implications, Applications, and Directions for Future Research

The local implications would include increasing the school's accountability rating with the State of Texas. The improvement of attendance rates would increase the financial resources the school receives for students, thereby putting more money into the school's budget. This would allow for teacher pay raises and improved facilities and other school expenditures. With teacher raises, the local economy would improve because teachers would be spending more money. The local businesses would prosper as

more income flowed into them, and students would be able to qualify for jobs requiring at least a high school diploma or could pursue postsecondary education.

The U. S. Department of Education (2016) found that between 2000 and 2014, the average salary of a high school or GED graduate was approximately \$25,000 per year, which was about 20% higher than those students who dropped out of school. If students pursue postsecondary education, their salaries will continue to increase. Hershbein and Kearney (2014) of the Hamilton Project found that the lifetime earnings of a person who earns a bachelor's degree is between \$800,000 and \$2,000,000.

The implications for future research include examining teacher training that incorporates student-centered lessons to build on students' prior knowledge.

Constructivist theory was applied in the project deliverable. Recommendations for practice and future research include the training of teachers using constructivist learning theory and a qualitative study to determine how faculty promote positive relationships with students in the classroom to enhance learning, attendance, and student success.

Conclusion

I conducted this study to effect change at the school at which I am employed. As a researcher, my goal was to examine relationships between student achievement and classroom environment, active learning, and student success along with the motivation to attend school. The framework of the study was the constructivist theory of learning, where students learn from or through their experiences. I collected 103 surveys from students who met the selection criteria for the study to ensure my results would be

trustworthy. I also retrieved student test and attendance data to use in my statistical analysis.

I discovered relationships do not exist between the variables in this study, as they tie to student achievement and attendance. I have also discovered a reliability in each of the variables examined. With a *Cronbach's Alpha* reliability ranging from .745 to .941, my findings suggest that teacher strategies do effect the classroom environment, active learning, student motivation, and student success. I concluded that student achievement is affected by the classroom environment, active learning, attendance, and student success and a mixed method should be conducted. Current teaching strategies should be addressed using the constructivist teaching professional development.

The results of this study allowed me to develop a professional training project that will be implemented at the start of the 2017 school year. I will present my project study findings with the goal of improving myself as an administrator, teachers as educational specialists and professionals, and students as learners.

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Appendix A: Project Deliverable

Professional Development/Training Curriculum and Materials

Purpose, Goals, Learning Outcomes, Target Audience

The purpose of the project deliverable is to present a professional development training that focuses on the Constructivist Theory of learning and other alternatives to the A+nyWhere Learning System.

A goal of this professional developments is to train teachers to use different strategies that incorporate the Constructivist Learning Theory. Another goal would be to teach teachers how to re-write curriculum to use in the target school's learning lab, and use existing technology resources to aide in credit recovery. The last goal would be to use existing, as well as consider the option to purchase different software programs available on the educational market.

The overall goal is to improve teaching methods and strategies that would exhibit the characteristics of the Constructivist Learning Theory. With this professional development, my objective is to involve teachers in the task of minimizing the number of student dropouts and improving the credit recovery program of the target school.

The target audience of this project deliverable professional development module includes teachers, the superintendent, program directors, and para-professionals. The outcomes would be to train teachers to use their prior knowledge to rewrite curriculum for the credit recovery program, while improving student academic performance on state assessments and attendance. Another outcome would include training teachers to use their knowledge and resourcefulness to implement current

software available on campus. A final outcome would be to model for teachers' Constructivist Learning strategies that could be implemented in the classroom.

Timeline & Activities

The timeline for this professional development would be the start of the 2017 – 2018 school year. This would allow for the professional development presentation and the adjustments of school budgets to be amended to meet the needs of the students in the 2017 – 2018 school year.

The activities would include trainings that would take place over the course of 9 days after school. Teachers are required to remain on campus 30 minutes each day after students are released to go home. Teachers would be able to attend trainings over the 9 sessions throughout the year and also during designated in-service days.

During the trainings, teachers would be collaborating in teams to re-write curriculum, review existing technological resources, and researching to locate new innovative software programs to use as a replacement of the current credit recovery program. The training will take place in the afternoons during 30 minute training sessions. These sessions will take place over 9 days after school using Constructivist Learning Strategies as a modeling tool.

Implementation & Evaluation Plan

The implementation of the professional development would be initiated by the researcher. Department chairs would monitor and maintain records for the credit recovery program students. The implementation of the new program for students would be monitored by an assigned teacher and department chair on a daily basis. I would have

corresponding teachers of core subjects also review, analyze, and grade work products of the students. The monitoring of students would become a daily routine for teachers during one of their 2 conference periods. Documentation of reviews and classroom visitation would be collected by the teacher assigned to the classroom.

The evaluation of the professional development will be determined with formative assessments of the teachers and based on summative student academic progress. The formative assessments for teachers will include end product or curriculum created by the teachers. The materials to be used in the training will include the state based curriculum, or Texas Essential Knowledge and Skills from the TEKS Resource System provided by the Texas Education Agency.

For students, assessments can be accomplished with report card grades every 3 and 6 weeks. It can also be accomplished with the formative and summative assessments conducted by teachers in the form of benchmark exams. State of Texas conducts End of Course (EOC) Exams will also act as an indicator of academic success. Another evaluation will be conducted on the new curriculum that is developed by the teachers for the credit recovery program, which can be monitored by the completion rates of students in the program. The current and available software on campus has grade monitoring capabilities to record student academic progress.

Detail of Training

The table below details the professional development activities that will occur over 9 days to help teachers.

Activity	Start Date	Completion Date
Invitations to Participate	8/2017	5/2018
Day 1 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: English I	9/2017	5/2018
Day 2 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: English I	9/2017	5/2018
Day 3 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: English I	10/2017	5/2018
Day 4 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: Algebra I	10/2017	5/2018
Day 5 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: Algebra I	11/2017	5/2018
Day 6 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: Algebra I	11/2017	5/2018
Day 7 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: Biology I	12/2017	5/2018
Day 8 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: Biology I	12/2017	5/2018
Day 9 P.M. Training 30 Min. Curriculum Re-Write, Collaborative Process: Biology I, Use of Existing Software, Brainstorm other outside resources for Software, Collaborative Process	1/2018	5/2018

Project Deliverable Presentation Outline

This Scope and Sequence is used in the Fuel Education Curriculum (2016) that is to be re-written by teachers adjusting to use Constructivist Learning Theories. This curriculum is derived by the Texas Education Agency in their Texas Essential Knowledge and Skills (2010). The State of Texas uses these TEKS as the standard for all curriculum and is the rationale for using it in this project deliverable.

English I: Skills – Day 1

Grade Level 9

English Skills IX introduces students to a variety of topics including:

- Antonyms
- Analogies
- Common expressions
- Connotation and denotation
- Greek and Latin words
- Poetry
- Purpose in writing
- Figurative language
- Appositives
- Clauses
- Phrases
- Vocabulary

English I: Course Objectives for Re-Write – Day 1

Grade Level 9

COURSE OBJECTIVES:

- The content in these courses is designed to meet and exceed the requirements of the National Council of Teachers of English (NCTE) for the Standards of English Language Arts.

- The Literature lessons provide a broad exposure to literature, enabling the student to acquire the necessary skills to understand and appreciate literature for a lifetime.

- Students will study the human condition through the exploration of the universal themes of literature, literary terms, devices and forms, and their application to life.

- The Usage component of both the Literature and English Skills titles offers extensive focus on the convention of writing which includes parts of speech, proper sentence structure, and sentence diagramming.

- Students are taught to identify grammar pitfalls that include subject/verb disagreement, tense shifts, double negatives, fragments and run on sentences, parallelism, and misused words. Sentence mechanics are addressed in each course. Lessons also provide instruction on capitalization and punctuation.

English I: Scope and Sequence for Re-Write – Days 2 and 3

1 Reading -

Alphabetization

Use of a dictionary to alphabetize words, importance of alphabetizing in the card catalog: alphabetizing by title, author, and subject; telephone directories, encyclopedia, thesaurus, atlases, periodicals, alphabetizing in bibliographies

Study: EB Learning Material

Essay: Paragraph

2 Reading - Analogies

Definition of an analogy, students practice completing analogies, strategies for recognizing analogous relationships: (specific to general, synonyms, antonyms, cause and effect, part to whole, item to category, time to process, object to action, object to function, part to whole, performer to action)

Study: EB Learning Material

Essay: Short Answer

3 Reading - Antonyms Improving vocabulary through the use of antonyms, identifying antonyms in a dictionary or thesaurus Essay: Short Answer

4 Reading - Common

Expressions

Everyday sayings, idioms, common expressions, euphemisms, implied meanings, clichés, folklore: (epic, folktales, fables, fairy tales, myths, parables, tall tales)

Essay: Illustration

5 Reading – Connotation and Denotation

Using denotation and connotation to determine the context word meaning, using a dictionary and thesaurus to choose the correct word definition and use Essay:

Short Answer

6 Reading - Greek and

Latin Words

Examples and definitions of words with Greek and Latin derivatives, using prefixes and suffixes to form words

Study: EB Learning Material

Essay: Expository

7 Reading – Greek Literature

Greek literature: lyric and epic poetry, drama, philosophy, histories, Homer: (Iliad, Odyssey), Hesiod, didactic, epic, melic, elegiac, iambic, choral poetry, hexameter, pentameter, Golden Age, Athens, Aeschylus, Sophocles, Oedipus, Euripides, Drama, Dionysus, Old Comedy, Middle Comedy, New Comedy, Menander, prose, Sophists, Socrates, Plato, Aristotle, Macedonia, Phillip II, Alexander the Great, Hellenistic Age, Epicurus, pastoral poetry, Polybius, Greco-Roman Age, Neoplatonic School of philosophy

Study: EB Learning Material

Essay: Persuasive

8 Reading – Homonyms and Homophones Recognizing the correct use of homonyms and homophones Essay: Short Answer

9 Reading - Language

Arts Terms 1

Allegory, alliteration, allusion, description, epic, irony: (dramatic irony, irony of situation, verbal irony) metaphor, paradox, personification, rhyme, rhyme scheme, satire, simile, stanza: (couplet, tercet, quatrain, cinquain, sestet, heptastich, octave), symbols and symbolism, verse

Study: EB Learning Material

10 Reading - Language

Arts Terms 2

Antagonist, character, characterization, dialogue, flashback, foreshadowing, imagery, mood, plot: (exposition, inciting incident, central conflict, climax, resolution, rising action, denouement, falling action) point of view: (first person, third person, omniscient, limited), protagonist, sequence of events, setting, soliloquy, theme, tone

Study: EB Learning Material

11 Reading - Multiple

Meaning Words Using a dictionary to identify the multiple meanings of words

Essay: Short Answer

12 Reading -

Paraphrasing-

Summarizing Direct quotations, paraphrasing, summarizing, plagiarizing, examples of paraphrasing and summarizing, the SQ3R method for learning new material (survey, question, read, recite, review)

Study: EB Learning Material

Essay: Short Report

13 Reading - Poetry

Poetry definition, imagery, figurative language, rhyme, lines, stanzas, basic forms of poetry: (ballad, sonnet, lyric, narrative, limerick), Shakespearean sonnet, line break, setting, theme

Study: EB Learning Material

Essay: Short Answer

14 Reading - Purpose in Writing

Writing process, points to consider when selecting an audience, writing:

(narrative, persuasive, descriptive, expository), transitional words: (further information, directional change, sequence and order, explanation, emphasis, location and setting, compare and contrast, summary and conclusion, time), order: (spatial order, chronological order, order of importance, logical order), point of view

Study: EB Learning Material

Essay: Letter Writing

15 Reading – Reading Strategies

Answer who, what, when, where, why, and how questions in a reading selection;

increase reading comprehension through the use and examination of the

following:

(vocabulary words, pronouns, cause and effect, story sequence, compare and contrast, author's tone, predicting outcomes); transitional words: (further information, directional change, sequence and order, explanation, emphasis, location and setting, compare and contrast, summary and conclusion, time)

Essay: Short Answer

16 Reading - Story

Details & Sequence Writing style: (word choice, tone, degree of formality, figurative language, rhythm, grammatical structure, sentence length, organization), story

elements: (characterization, setting, plot, conflict, point of view), conflict: (man versus man, character versus self, man versus nature, man versus society, man versus fate or destiny), recall details from stories, put story parts in order or sequence, using visualization, story pattern, chronology, flashback and foreshadowing, plot routes, the SWBS technique, transitional words: (further information, directional change, sequence and order, explanation, emphasis, location and setting, compare and contrast, summary and conclusion, time)

Study: EB Learning Material

Essay: Narrative

17 Reading - Synonyms Improving vocabulary through the use of synonyms, identifying synonyms in a dictionary or thesaurus Essay: Paragraph

18 Reading - Word

Recognition Strategies for critical recognition of small words in larger words, using context, prefixes, suffixes, and roots to identify unknown words Essay: Short Answer

19 Usage - Abbreviations

Identify and correctly use abbreviations for states, countries, addresses, measurement, months, days of the week, time, titles, government departments and offices, organizations

Study: EB Learning Material

Essay: Letter Writing

20 Usage - Appositives Definition and use of appositives and appositive phrases, punctuation with appositives Essay: Short Answer

21 Usage - Capitalization

Rules for capitalizing names, dates, geographic names, government departments and offices, organizations, seasons, days of the week, months, holidays, title or rank, historic events, historic periods, historic documents, geographic directions, planets, proper adjectives

Essay: Paragraph

22 Usage - Clauses Definition and use of independent and subordinate (dependent) clauses, relative pronouns, clauses that act as adjectives Essay: Paragraph

23 Usage – Compound Words

Definition and examples of compound words, students identify compound words, hyphenated compound words, compound nouns, compound personal pronouns, open compound words, gerunds

Essay: Short Answer

24 Usage – Nouns Parts of speech: (noun, pronoun, verb, adjective, adverb, preposition, conjunction, interjection), definition and use of nouns, common and proper nouns, concrete and abstract nouns

Essay: Descriptive

25 Usage - Parts of Speech

Definition and use of prepositions and direct objects, prepositional phrases, compound prepositions, objective case pronouns, conjunctions: (coordinating, correlative

conjunctions), use of interjections

Essay: Paragraph

26 Usage - Phrases Definition of a phrase, types of phrases: (verb, noun, prepositional, adjective, adverb), object of the preposition, modifiers Essay: Short Answer

Pronouns

Definition of a pronoun, pronoun types: (personal, relative, interrogative, demonstrative, indefinite), antecedents and personal pronouns, singular and plural pronouns, first, second and third person pronouns, pronoun cases: (nominative, objective, possessive), pronoun genders: (masculine, feminine, neutral), reflexive pronouns

Essay: Paragraph

28 Usage - Punctuation 1

Use of end marks in sentences: (period, question mark, exclamation point), use of punctuation: (to enclose, to link, to show omission, to separate), sentence types: (declarative sentence, imperative, exclamatory, interrogative), use of periods in abbreviations

Essay: Short Answer

29 Usage - Punctuation 2

Use of a comma in a compound sentence, commas used with other punctuation; use of a comma to separate introductory words, transitional words, introductory participial phrases, long introductory prepositional phrases, introductory adverb clauses

Essay: Paragraph

30 Usage – Sentence Construction

Definition of a sentence; fragment; run-on; declarative, interrogative, exclamatory, and imperative sentences Essay: Narrative

31 Usage Problems Correct use of subject verb agreement, phrases: (verb, prepositional, adjective), pronouns, collective nouns, use of singular and plural, review of most grammar rules Essay: Descriptive

32 Usage - Verbs 1 Definition and use of verbs, action verbs: (physical action, mental action), transitive verbs, intransitive verbs, and linking verbs Essay: Short Answer

33 Usage - Verbs 2 Verb tenses, regular and irregular verbs, action verbs, linking verbs, helping verbs, verb phrases, transitive and intransitive verbs, main verbs Essay: Descriptive

34 Usage - Writing

Process Overview

Overview of the writing process, writing activity, prewriting, clustering, brainstorming, five senses chart, six big questions, free writing, looping, chronological order, spatial order, order of importance, transitional words: (further information, directional change, sequence and order, explanation, emphasis, location, compare and contrast, summary and conclusion, time)

Essay: Descriptive

35 Vocab - Final

Consonant Blends

Review of ending blends /ld/, /lt/, /nd/, /nt/, /ry/, /ty/, and /nk/; students complete words with the correct consonant blend

36 Vocab - Initial Blends Definition and review of consonant blends using /bl/, /br/, /cl/, /cr/, /dr/, /fl/, /fr/, /gl/, /gr/, /pl/, and /pr/ Essay: Paragraph

37 Vocab - Short Vowel

Review Students identify short vowel sounds Essay: Paragraph

38 Vocab - Silent Letters Introduction of words that use silent letters /kn/, /wr/, and /gn/; students complete words with the correct sounds Essay: Short Answer

39 Vocab - Spelling

Review Using a dictionary, adding suffixes to words, understanding changes with plurals, verbs, vowel sounds, syllabification as a spelling aid, spelling guidelines Study:
EB Learning Material

40 Vocab - Vowel

Diphthong Review

Diphthongs that use the letters /ou/, /oi/, and /ow/; students complete words using correct vowel combinations

Algebra I: Skills – Day 4

A Function Approach Part 1 introduces students to:

Independent and dependent variables

Verbal and algebraic models to write algebraic expressions

Patterns as algebraic expressions

The relationship between variables in a situation

Domain and range for an application problem

Positive and negative correlations in a real-world context

Graphs to represent a described situation

Functions from tables, graphs, descriptions, and mappings

Conversion between fractions, decimals, and percent

Direct variation relationship between diameter and circumference

Proportional reasoning to create tables, graphs, and equations to make predictions

from data

Interpretation of constant of variation in real-world context

Proportions as linear functions

Slope as a rate of change from a graphical and physical point of view

Lines with no slope, zero slope, positive slope, and negative slope

Graphing an equation from slope-intercept form

Drawing graphs of lines in $y = mx + b$ form

Writing the equation of a line

Algebra I Course Objectives for Re-Write: - Day 4

The Algebra I: A Function Approach Part 1 course is designed to help the student understand that functions represent a relationship of dependence, which can be represented in a variety of ways including tabular, graphical, and symbolic. The student will integrate the mechanics of algebra with real-life applications and gain an appreciation of the many ways algebra is used in everyday situations.

The student will gain an understanding of how algebra can be used to express generalizations, learn to recognize and use the power of symbols to represent situations, and understand different algebraic methods used to solve problems.

The student will learn to identify and solve proportional or non-proportional linear relationships in application situations. They will obtain an understanding for the meaning of the slope, intercepts, and zeros of the graphs of linear functions. They will learn to interpret and describe the effects of parameter changes for linear functions in real world and mathematical situations.

The student will formulate systems of linear equations and inequalities from problem situations, use a variety of methods to solve the system, and analyze the system's solution in terms of the situation.

The student will understand that graphs of quadratic functions are affected by the parameters of the function and interpret and describe the effects of changes to these parameters. They will learn different methods to solve quadratic equations and determine which method is appropriate for a given situation.

The student will understand there are situations modeled by functions that are neither linear nor quadratic and model those situations.

Lesson Content Activities – Day 5

Unit 1: Foundations for Functions

1 Mathematical Models 1

Identify independent and dependent variables; organize and represent independent and dependent values in a graph or tabular model

Study: Graphing Calculator,

Drag and Drop

Activities (2), Layered

Sequence

2 Mathematical Models 2

Convert between verbal and algebraic models to write algebraic expressions; use the model to make predictions; find specific function values

Study: Drag and Drop

Activity,

Graphing Calculator

3 Identifying Patterns 1

Express a pattern as an algebraic expression, use the algebraic expression to make predictions about the pattern Study: Fill in Charts (2)

4 Identifying Patterns 2

Find a rate of change; find an algebraic rule for a pattern, determine the constant value in a pattern, use the rule to make predictions about the pattern

Study: Graphing Calculator,

Drag and Drop Activity, Fill in Charts(2), Layered Sequence

V-Labs: Functions and Patterns

5 Independent and Dependent Variables

Determine the relationship between variables in a situation; determine independent and dependent quantities on a graph, table, situation, or equation

Study: Fill in Chart, Reflect and Apply Worksheet

6 Domain and Range

Identify a reasonable domain and range for an application problem; determine domain and range from graph or table; express domain and range in set-builder notation; identify discrete and continuous graphs Study: Drag and Drop Activity, Layered Sequence, Reflect and Apply Worksheet

7 Graphing a Story

Identify independent/dependent quantities for a situation; determine reasonable domain and range for a situation; develop a graph for a functional relationship

Study: Drag and Drop Activity, Reflect and Apply Worksheet: Matching Graphs to Data

8 Domain and Range from Equations

Calculate a range for a given domain; calculate a domain for a given range

9 Correlations 1

Recognize positive correlations in a real-world context; develop a scatter plot; determine domain and range for a scatter plot Study: Graphing Calculator Drag and Drop Activity, Fill in Chart

10 Correlations 2

Recognize negative correlations in a real-world context; recognize negative correlations from a graph; develop a scatter plot Study: Graphing Calculator

11 Correlations 3

Recognize no correlation, positive correlation, and negative correlation in varied real-world contexts Study: Graphing Calculator Drag and Drop Activities (2)

12 Graphs of Real-World Situations

Create graphs to represent a described situation; read a graph representing a relationship between two variables, e.g., height vs. time

13 Interpreting Graphs

Match or create real-world descriptions of graphs; determine reasonable domain and range for a situation; distinguish between continuous and discrete graphs; identify graphs with a constant rate of change Study: Layered Sequences (3)

V-Labs: Matching Graphs to Data

14 Functions 1

Develop the definition of function; identify a relation; identify a mapping Study: Animation (2), Drag and Drop Activity

15 Functions 2

Identify functions from tables, graphs, descriptions, and mappings; vertical line test Study: Animation (3), Layered Sequence V-Labs: Vertical Line

Unit 2: Introduction to Linear Functions – Day 6

16 Proportions as Functions 1

Convert between fractions, decimals, and percent's; identify ways to express a ratio; collect and organize data to use in proportions; use data to determine functional relationships; solve problems using percent and proportions Study: Fill in Charts (5)

17 Proportions as Functions 2

Function concepts in proportions; relate direct variation to constant of variation; solve problems involving proportional change Study: Drag and Drop Activity, Fill in Chart

18 Proportions as Functions 3

Use simple proportions to solve one-step equations; determine constant of variation; convert proportions to direct variation functions

Study: Graphing Calculator (6) Drag and Drop Activity

19 Investigations with the Constant of Variation

Learn direct variation relationship between diameter and circumference; introduce slope as a constant of variation; determine the constant of variation for linear data; use proportional change to solve problems Study: Graphing Calculator (11) Fill in Charts (4), Off-Line Investigation V-Labs: Time and Distance

20 Predictions from Data

Use proportional reasoning to create tables, graphs, and equations to make predictions from data; create a scatter plot; identify a line of best fit Study: Graphing Calculator (10) Fill in Charts (3), Off-Line Investigation V-Labs: Line of Best Fit

21 Direct Variation

Interpret constant of variation in real-world context; identify direct variation relationship from a table or graph; interpret meaning of axes intercepts in real-world contexts Study: Graphing Calculator (6) Fill in Chart

22 Summary of Direct Variation Functions

Summary of proportions as linear functions; represent data in graphs, tables, and scatter plots; calculate the constant of variation; generate a direct variation equation to solve a problem or make a prediction about data Study: Graphing Calculator (10) Fill in Charts (4)

Unit 3: Linear Functions – Day 6

23 Introduction to Rate of Change

Introduce slope as a rate of change from a graphical and physical point of view; introduce formal definition of slope; determine slope of a line from graphs and tables Study: Animation, Fill in Charts (3), Layered Sequences (4), NLVM Activities (2), Plot the Line

24 Slope and Rate of Change

Slope in additional real-world situations; slope as a rate of change between two quantities; interpret how changes in the rate affect changes in a graph Study: Graphing

Calculator, Drag and Drop Activity, Fill in Charts (2), Layered Sequences (2), Plot the Point, Reflect and Apply Worksheet

25 Rate of Change Given 2

Points Slope formula

Study: Graphing Calculator (5) V-Labs: Functions and Patterns

26 Rate of Change and Slope Summary

Slope in additional real-world situations; slope as rise/run; find slope from graph of a line; relate slope formula to graph Study: Drag and Drop Activity, Layered Sequence

V-Labs: Rise and Run

27 Graphing with Slope 1

Identify lines with no slope, zero slope, positive slope, and negative slope; use slope formula to calculate no slope, zero slope, positive and negative slope

28 Graphing with Slope 2 Slope as a parameter change of the equation $y = mx$; identify how the value of the slope affects the steepness of a line Study: Graphing Calculator (6) Drag and Drop Activities (3), Layered Sequences (2)

29 Constant of Variation Real-world situations for $y = mx$; identify how changes in rate of change affect the possible outcome for a situation Study: Graphing Calculator (4) Fill in Charts (3)

30 The Slope-Intercept

Equation Introduce meaning of y-intercept in real-world contexts

Study: Graphing Calculator (4) Plot the Line, Reflect and Apply Worksheet V-Labs: Slope-Intercept

31 Linear Functions and Parameter Changes

Slope and y-intercept as parameter changes; graph an equation from slope-intercept form; evaluate a function using function notation Study: Graphing Calculator (2) Animations (4), Fill in Charts (2), Layered Sequences (3), Plot the Line, Reflect and Apply Worksheet

32 Applications of $y = mx + b$

Advanced real-world contexts for linear functions; identify slope and y-intercept to develop a linear function for the real-world context; identify the domain and range for the real-world context Study: Animation, Graphing Calculator, Drag and Drop Activities (2) V-Labs: Rate of Change

33 Parameter Changes in $y = mx + b$

Identify numerical and graphical parameter changes for slope and y-intercept; write an equation of a line in slope-intercept form from a graph Study: Graphing Calculator (6) Animation, Drag and Drop Activities (2), Layered Sequences (3)

34 Linear Equations from Two Points

Write an equation of a line in slope-intercept form when given two points on the line, a graph of the line, or data in an application problem Study: Graphing Calculator (2)

V-Labs: Linear Equations from Two Points

35 The Point-Slope Equation Write the point-slope equation for a line given the slope and point on a line; use the equation to answer questions about the function Study: Graphing Calculator (3) Drag and Drop Activity

36 Graphs of $y = mx + b$

Draw graphs of lines in $y = mx + b$ form; name slope-intercept equation from a graph; change an equation from point-slope to slope-intercept form Study: Layered Sequences (3), NLVM Activity, Plot the Line

37 Summary of Linear

Equations Review of concepts in lessons 29–36 Study: Fill in Charts (3), Graphing Calculator (3) Layered Sequence

Comprehensive Biology Grade Levels 9–12**Biology I: Topics – Day 7**

Comprehensive Biology introduces students to a variety of topics including:

- science as inquiry
- the history and nature of science
- science and technology
- the structure and function of organisms
- matter
- energy
- organization in living systems
- the molecular basis of heredity
- life cycle and reproduction
- diversity
- adaptations
- life origins
- the interdependence of organisms
- the behavior of organisms
- organisms in the environment
- basic chemistry
- molecular genetics
- prokaryotes

- protists
- fungi
- animal phyla
- comparative morphology
- homeostasis
- population ecology
- nonrenewable resources

Biology I: Course Objectives for Re-Write – Days 7 and 8

The Comprehensive Biology course content is based on the National Science Education Standards (NSES) and the standards of the states. These lessons are designed to meet and exceed the requirements of the National Science Education Standards. The requirements are identified in the following standards: Science Inquiry, Life Science, Science and Technology, Science in Personal and Social Perspectives, and the History and Nature of Science. Test questions reflect the full range of Bloom's Taxonomy from basic knowledge to application, analysis, and synthesis. The questions challenge the student to apply what they have learned in the study guide. The essay assignments require the student to expand upon the information from the lesson in a higher order thinking exercise. A scoring rubric is provided for both student and teacher. The Essential Content Essay guide is provided for teachers at the end of the Scope & Sequence. This guide will assist teachers in the grading of the essential content essays by providing an answer key for each of the essential content points.

1 Biology Themes Characteristics of life: cells, heredity and DNA, energy requirement, homeostasis, response to stimuli and environment, growth and development, and organization; introduction to branches of biology; unifying themes; importance of biological sciences to human society Study: EB Learning Material Essay: Descriptive

2 History of Biology Major contributions and theoretical framework; development of cell theory; history of genetics and evolutionary theory; unification of the themes of the cellular basis of life; heredity and evolution by natural selection to explain the diversity and connectedness of life on earth today; introduction to current issues in biotechnology Study: EB Learning Material Essay: Expository

3 The Scientific Method Underlying steps and rationale of the scientific method; inductive and deductive reasoning; explanation of how the scientific method is used to gain knowledge; hypothesis formation and theory generation; examples of how the scientific method is used to answer questions about the natural world Study: EB Learning Material 1 .PDF Experimental Research Site Essay: Descriptive

4 Designing Experiments Sources of information; experimental design; identification of dependent and independent variables; purpose of experimental controls; purpose of controlled experimental conditions; team and consensus building; suggested

activities included Study: EB Learning Material 3 .PDFs Germination Data Sheet, Fertilization Date Sheet, Arthropods Data Sheet Essay: Descriptive

5 Collecting Data Laboratory tools and procedures; data and measurements; non-experimental data; use of appropriate technologies; using spreadsheets to enter data; creating computer graphs Study: EB Learning Material 2. PDFs Lab Safety Rules, Natural Selection Model Web Link to Global Institute of Sustainability, Arizona State University Essay: Descriptive

6 Interpreting and Presenting Data Processes of data interpretation; use and interpretation of tables, graphs, and diagrams; concept of statistical analysis; alternative explanations; communication and defense of results; team and consensus building; suggested activities included Study: EB Learning Material Essay: Graph, Paragraph

7 Basic Chemistry Energy and matter; atoms; molecules and compounds; chemical bonds and chemical reactions; water and importance of water to life; pH, acids, bases, and buffers; chemical solutions Study: EB Learning Material 2 .PDFs The Periodic Table, The pH Scale VLabs: Reaction and Rates, Solubility of Salts Essay: Descriptive

8 The Chemistry of Life Organic molecules in living things; structure and functions of carbohydrates, lipids, proteins, and nucleic acids (DNA and RNA); chemical

reactions in cells; introduction to enzymes and ATP Study: EB Learning Material 1 .PDF

Periodic Chart of Elements Essay: Expository

9 Cells and Cell Theory Characteristics of cells; cellular basis of life; cell theory; regulation of cellular activities; evolution of cells Study: EB Learning Material Essay: Descriptive

10 Types of Cells Prokaryotic and eukaryotic cells; unicellular protists; fungal cells; plant and animal cells; cell differentiation in complex organisms Study: EB Learning Material Essay: Compare/Contrast

11 Cell Structure and Function Structure and function of cellular components, including the nucleus, organelles, cytoskeleton and ribosomes; the cell membrane and transport processes such as diffusion, osmosis, passive and active transport processes; endocytosis and exocytosis Study: EB Learning Material Essay: Descriptive

12 Energy and Cells Energy and energy transformations; the sun and life on earth; energy and organic molecules; cellular metabolism; enzymes; regulation of metabolism by enzymes, ATP; cellular respiration and photosynthesis; energy flows from the cell to ecosystem scales Study: EB Learning Material Essay: Expository

13 Cell Division The cell cycle, mitosis and meiosis; regulation of the cell cycle; cancer and the cell cycle; unique characteristics of meiosis; meiosis and genetic variation; diploid and haploid cells Study: EB Learning Material Essay: Narrative

14 Reproduction and Development Modes of asexual and sexual reproduction; binary fission, budding, regeneration, and vegetative processes; life cycles in sexual reproduction; modes of sexual reproduction; cell differentiation, growth, and development; stem cells Study: EB Learning Material Essay: Descriptive

15 DNA: Genes and Chromosomes Introduction to inheritance and molecular genetics; sources of genetic variation; genetic terms; karyotype; genomes Study: EB Learning Material Web Link to Human Genome Project Essay: Expository

16 Mendelian Genetics Classical genetics; Mendel's experiments; Punnet squares; dihybrid crosses and independent assortment; pedigrees Study: EB Learning Material Essay: Descriptive

17 Patterns of Inheritance Non-Mendelian inheritance (polygenic traits, co-dominance, incomplete dominance); sex linked inheritance; genetic diseases; changes in chromosome number Study: EB Learning Material Essay: Expository

18 Molecular Genetics DNA and RNA; introduction to gene expression and regulation; transcription and translation; mutation and disease; mutation and evolution; gene technology Study: EB Learning Material Essay: Expository

19 Overview of Evolution Overarching concepts of evolution; evidence that supports evolutionary theory including: fossils, biogeography, comparative anatomy, biochemistry, and molecular genetics; development of evolutionary theory; evolution and diversity Study: EB Learning Material Essay: Descriptive

20 Natural Selection and Microevolution Darwinian evolution; mechanisms of evolution; sources of genetic variation; adaptation and natural selection; examples of natural selection and microevolution Study: EB Learning Material Essay: Narrative

21 Extinction, Speciation, and Macroevolution Biological species concept; development of new species; reproductive isolation; mass extinctions; molecular clocks; descent with modification; unity and diversity of life; human evolution Study: EB Learning Material

22 Classification, Taxonomy, and Phylogeny Basis for classification schemes; classification of living things; phylogeny and evolutionary relationships; cladograms; the tree of life Study: EB Learning Material Essay: Expository

23 Viruses, Viroids, and Prions Structure, function, and importance of nonliving chemical infectious agents; importance of viruses to microevolution in bacteria and other organisms; kinds of viruses; prions and viroids; viral diseases Study: EB Learning Material Essay: Compare/Contrast

24 The Prokaryotes: Archaeobacteria and Eubacteria Basic biology; diversity, ecology, and medical significance of bacteria; unique characteristics of prokaryotes; Archaeobacteria and Eubacteria; bacterial metabolism; nitrogen fixation and decomposition; bacterial diseases; use of bacteria in industry and biotechnology Study: EB Learning Material Essay: Descriptive

25 The Protists Basic biology; diversity, ecology, and medical significance of protists; characteristics of protists; major phyla; protists as primary producers; use in industry; diseases caused by protists. Study: EB Learning Material Essay: Paragraph

26 Fungi Basic biology; diversity, ecology, and medical significance of fungi; characteristics of fungi; major phyla; fungi as symbionts and decomposers; use of fungi in industry; diseases caused by fungi Study: EB Learning Material Essay: Paragraph

27 Plant Diversity Characteristics of plants; nonvascular plants; seedless vascular plants; gymnosperms, angiosperms, monocots, and dicots; evolution of plants; anatomy;

physiology; xylem and phloem; flowers and reproductions; seeds and fruit; plants and people Study: EB Learning Material Essay: Paragraph

28 Plant Responses Plant responses to internal changes and environmental stimuli; plant hormones; plant growth and development Study: EB Learning Material Essay: Descriptive

29 Animal Diversity: Invertebrates Major animal phyla and their characteristics; evolutionary innovations of major phyla; major vertebrate groups and their characteristics; evolution of vertebrates Study: EB Learning Material Essay: Descriptive

30 Animal Diversity: Vertebrates Comparative morphology, anatomy, and physiology of animal phyla; comparative anatomy and physiology of vertebrates; evolution of nervous, respiratory, circulatory, and excretory systems of animals Study: EB Learning Material Essay: Descriptive

31 Animal Form and Function Comparative morphology, anatomy, and physiology of animal phyla; comparative anatomy and physiology of vertebrates; evolution of nervous, respiratory, circulatory, and excretory systems of animals Study: EB Learning Material Essay: Expository

32 Animal Behavior Animal responses to internal changes and environmental stimuli; coordination and control of animal responses (nervous and hormonal); behavior and evolution; instinctive and learned behavior; human behavior Study: EB Learning Material Essay: Compare/Contrast

33 Human Biology I Organization of the human body; tissue types and their functions; organs and organ systems; maintenance of homeostasis; integration and control Essay: Expository

34 Human Biology II General structure and function of human organ systems: integumentary, musculoskeletal, cardiovascular, respiratory, digestive, urinary, immune, nervous, endocrine, and reproductive Essay: Expository

35 Ecology Overview Definition of ecology; ecology sub-disciplines; ecology and evolution; ecology and flows of energy and matter; ecology and distribution of organisms; organization in living systems; relationship between cellular activities; flows of matter and energy in ecosystems Study: EB Learning Material Essay: Narrative

36 Populations and Communities Population ecology, communities, trophic levels and energy flow; predation; competition; symbioses; succession; population dynamics and evolution Study: EB Learning Material Essay: Poster

37 Energy, Matter, and Ecosystems Energy flows and biogeochemical cycling of matter; organisms and environment; interdependence of living things; nonrenewable resources Study: EB Learning Material Essay: Short Report

38 Biomes and the Biosphere Climate and distribution of living things on earth; diversity of aquatic and terrestrial ecosystems; interactions of sun, earth, atmosphere, water, and biosphere Study: EB Learning Material Web Link to NASA Earth Observatory Essay: Descriptive

39 Humans and Environments Human population; human impacts on biosphere including: habitat destruction, pollution, and overuse of nonrenewable resources Study: EB Learning Material Essay: Descriptive

Possible Resources to Research: Day 9



Appendix B: WIHIC/A+LS Survey

Classroom Environment	Almost Never	Seldom	Some- times	Often	Almost Always
1. I make friendships easily among students in class.	1	2	3	4	5
2. I know other students in class.	1	2	3	4	5
3. I am friendly to members in class.	1	2	3	4	5
4. Members of the class are my friends.	1	2	3	4	5
5. I work well with other class members.	1	2	3	4	5
6. I help other class members who are having trouble with their work.	1	2	3	4	5
7. Students in class like me.	1	2	3	4	5
8. I get help from other students.	1	2	3	4	5
9. The teacher takes a personal interest in me.	1	2	3	4	5
10. The teacher goes out of his/her way to help me.	1	2	3	4	5
11. The teacher considers my feelings.	1	2	3	4	5
12. The teacher helps me when I have trouble with the work.	1	2	3	4	5
13. The teacher talks with me.	1	2	3	4	5
14. The teacher is interested in my problems.	1	2	3	4	5
15. The teacher moves about the class to talk with me.	1	2	3	4	5
16. The teacher's questions help me to understand.	1	2	3	4	5
17. I cooperate with other students when doing assignment work.	1	2	3	4	5
18. I share my books and resources with other students when doing assignments.	1	2	3	4	5
19. When I work in groups, there is teamwork.	1	2	3	4	5
20. I work with other students on projects in class.	1	2	3	4	5
21. I learn from other students in class.	1	2	3	4	5
22. I work with other students in class.	1	2	3	4	5
23. I cooperate with other students on class activities.	1	2	3	4	5
24. Students work with me to achieve class goals.	1	2	3	4	5

Classroom Environment	Almost Never	Seldom	Some- times	Often	Almost Always
25. The teacher gives as much attention to my questions as to other students' questions.	1	2	3	4	5
26. I get the same amount of help from the teacher, as do other students.	1	2	3	4	5
27. I have the same amount of say in this class as other students.	1	2	3	4	5
28. I am treated the same as other students in this class.	1	2	3	4	5
29. I receive the same encouragement from the teacher as other students do.	1	2	3	4	5
30. I get the same opportunity to contribute to class discussions as other students.	1	2	3	4	5
31. My work receives as much praise as other students' work.	1	2	3	4	5
32. I get the same opportunity to answer questions as other students.	1	2	3	4	5

Active Learning	Almost Never	Seldom	Some- times	Often	Almost Always
33. I discuss ideas in class.	1	2	3	4	5
34. I give my opinions during class discussions.	1	2	3	4	5
35. The teacher asks me questions.	1	2	3	4	5
36. My ideas and suggestions are used during classroom discussions.	1	2	3	4	5
37. I ask the teacher questions.	1	2	3	4	5
38. I explain my ideas to other students.	1	2	3	4	5
39. Students discuss with me how to go about solving problems.	1	2	3	4	5
40. I am asked to explain how I solve problems.	1	2	3	4	5
41. I engage in activities in class to test my ideas.	1	2	3	4	5
42. I am asked to think about the evidence for statements.	1	2	3	4	5
43. I engage in activities in class to answer questions coming from discussions.	1	2	3	4	5
44. I explain the meaning of statements,	1	2	3	4	5

diagrams and graphs.						
45.	I engage in activities in class to answer questions, which puzzle me.	1	2	3	4	5
46.	I engage in activities in class to answer the teacher's questions.	1	2	3	4	5
47.	I find out answers to questions by doing activities in class.	1	2	3	4	5
48.	I solve problems by using information obtained from my own activities in class.	1	2	3	4	5
49.	Getting a certain amount of work done is important to me.	1	2	3	4	5
50.	I do as much as I set out to.	1	2	3	4	5
51.	I know the goals for class.	1	2	3	4	5
52.	I am ready to start class on time.	1	2	3	4	5
53.	I know what I am trying to accomplish in class.	1	2	3	4	5
54.	I pay attention during class.	1	2	3	4	5
55.	I try to understand the work in class.	1	2	3	4	5
56.	I know how much work I have to do.	1	2	3	4	5

Student Motivation to Stay in School		Almost Never	Seldom	Some- times	Often	Almost Always
57.	The implementation of the A+nyWhere Learning system motivated me to attend school on a more consistent basis than when I was taught by a teacher who used direct instruction	1	2	3	4	5
58.	The implementation of the A+nyWhere Learning encouraged me to stay and school and work towards my diploma.	1	2	3	4	5

Student Success	Almost Never	Seldom	Some- times	Often	Almost Always
59. The A+nyWhere Learning System online Instruction prepared me for college/work	1	2	3	4	5
60. The A+nyWhere Learning System online instruction program was challenging.	1	2	3	4	5
61. The implementation of the A+nyWhere Learning System increased my effort to earn more credits.	1	2	3	4	5
62. Learning with the A+nyWhere Learning System was enjoyable.	1	2	3	4	5
63. My level of knowledge increased due to the delivery method of the A+nyWhere Learning System.	1	2	3	4	5
64. My learning increased more with the A+ny Where Learning System than when taught using direct instruction.	1	2	3	4	5
65. I would recommend the A+nyWhere Learning System to anyone who is thinking of dropping out of school.	1	2	3	4	5
What is your name?					
What is your student identification number?					

Appendix C: Permission Letter Patricia Lee

Subject: RE: Request for permission
Date: Mon, May 21, 2012 07:52 AM CDT
From: "Lee, Patti M." <Patricia.Lee@fhdschools.org>
To: Richard Joyer <richard.joyer@waldenu.edu>
Reply To: "Lee, Patti M." <Patricia.Lee@fhdschools.org>

Richard,
I would be honored for you to utilize the surveys and questionnaires in your research.
Thank you,
Dr. Patti Lee
Assistant Principal Intern
Daniel Boone Elementary School
636-851-5581

From: Richard Joyer [mailto:richard.joyer@waldenu.edu]
Sent: Sunday, May 20, 2012 4:10 PM
To: Lee, Patti M.
Subject: Request for permission

Ms. Lee:
My name is Richard Joyer. I am a doctoral student at Walden University pursuing an Ed. D. in Administrative Leadership. I am currently in the process of writing my Capstone Project, or Dissertation, entitled "A Phenomenological Study to Determine Why At-Risk Students Dropout or Opt to Obtain a High School Education Through an Alternative Method". The alternative method I am discussing is the A+LS we use at our school. I will be attempting to follow some of your recommendations to include a larger cohort of individuals, over a longer period of time, at least 5 years. I have made contact with some of these participants and they have agreed to assist me in my research.

I am writing to ask your permission to use your surveys and questionnaires as part of my research. Please be assured that proper citation of information will be given. Please let me know if you approve this request.

Thank you,
Richard Joyer
E-mail

Appendix D: Permission Letter Barry Fraser

From: Barry Fraser <B.Fraser@curtin.edu.au>
 Subject: RE: Request for permission
 Date: Sun, May 20, 2012 07:23 PM CDT
 From: Barry Fraser <B.Fraser@curtin.edu.au>
 To: Richard Joyer <richard.joyer@waldenu.edu>
 Reply To: Barry Fraser <B.Fraser@curtin.edu.au>

Richard

You have my permission to use the WIHIC.

Dr. Barry J Fraser
 John Curtin Distinguished Professor
 Director | Science and Mathematics Education Centre
 Associate Dean | Graduate Studies | Science and Engineering

Web | <http://smec.curtin.edu.au>
 Address | GPO Box U1987 Perth WA 6845
 Curtin University is a trademark of Curtin University of Technology.
 CRICOS Provider Code 00301J (WA), 02637B (NSW)

From: Richard Joyer [mailto:richard.joyer@waldenu.edu]
 Sent: Monday, 21 May 2012 5:16 AM
 To: Barry Fraser
 Subject: Request for permission

Mr. Fraser:

My name is Richard Joyer. I am a doctoral student at Walden University pursuing an Ed. D. in Administrative Leadership. I am currently in the process of writing my Capstone Project, or Dissertation, entitled "A Phenomenological Study to Determine Why At-Risk Students Dropout or Opt to Obtain a High School Education Through an Alternative Method". The alternative method I am discussing is the A+nywhere online learning system we use at our school.

I am writing to ask your permission to use your WIHIC questionnaire as part of my research. Please be assured that proper citation of information will be given. Please let me know if you approve this request.

Thank you,
 Richard Joyer